

400-101 (221 Questions)

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Exam Code: 400-101

Exam Name: CCIE Routing and Switching Written Exam, v5.1



Q&A
CCIE Routing and Switching Written
400-101
(221 Questions)

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QUESTION 1

Refer to the exhibit. Which two statements are true? (Choose two)

```
Routing Process "ospf 1" with ID 1.1.1.1
Start time: 1w5d, Time elapsed: 4d11h
Supports only single TOS(TOS0) routes
Supports opaque LSA
Supports Link-local Signaling (LLS)
Supports area transit capability
Router is not originating router-LSAs with maximum metric
Initial SPF schedule delay 5000 msec
Minimum hold time between two consecutive SPF's 10000 msec
Maximum wait time between two consecutive SPF's 10000 msec
Incremental-SPF disabled
Minimum LSA interval 5 secs
Minimum LSA arrival 1000 msec
LSA group pacing timer 240 secs
Interface flood pacing timer 33 msec
Retransmission pacing timer 66 msec
Number of external LSA 0. Checksum Sum 0x000000
Number of opaque AS LSA 0. Checksum Sum 0x000000
Number of DCbitless external and opaque AS LSA 0
Number of DoNotAge external and opaque AS LSA 0
Number of areas in this router is 1. 1 normal 0 stub 0 nssa
Number of areas transit capable is 0
External flood list length 0
IETF NSF helper support enabled
Cisco NSF helper support enabled
Reference bandwidth unit is 100 mbps
  Area BACKBONE(0)
    Number of interfaces in this area is 2 (1 loopback)
    Area has no authentication
    SPF algorithm last executed 00:00:11.176 ago
    SPF algorithm executed 7 times
    Area ranges are
    Number of LSA 3. Checksum Sum 0x0140E9
    Number of opaque link LSA 0. Checksum Sum 0x000000
    Number of DCbitless LSA 0
    Number of indication LSA 0
    Number of DoNotAge LSA 0
    Flood list length 0
```

- A. This is the output of the show ip ospf command.
- B. This is the output of the show ip protocols command.
- C. This router is an ABR.
- D. This router is an ASBR.
- E. Authentication is not configured for the area.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 2

Which OpenStack component implements role-based access control?

- A. Horizon
- B. Nova
- C. Neutron
- D. Keystone

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 3

Which IPv6 tunneling method allows Host A to communicate with Host B within the same site?

- A. ISATAP
- B. 6to4
- C. GRE
- D. Manual

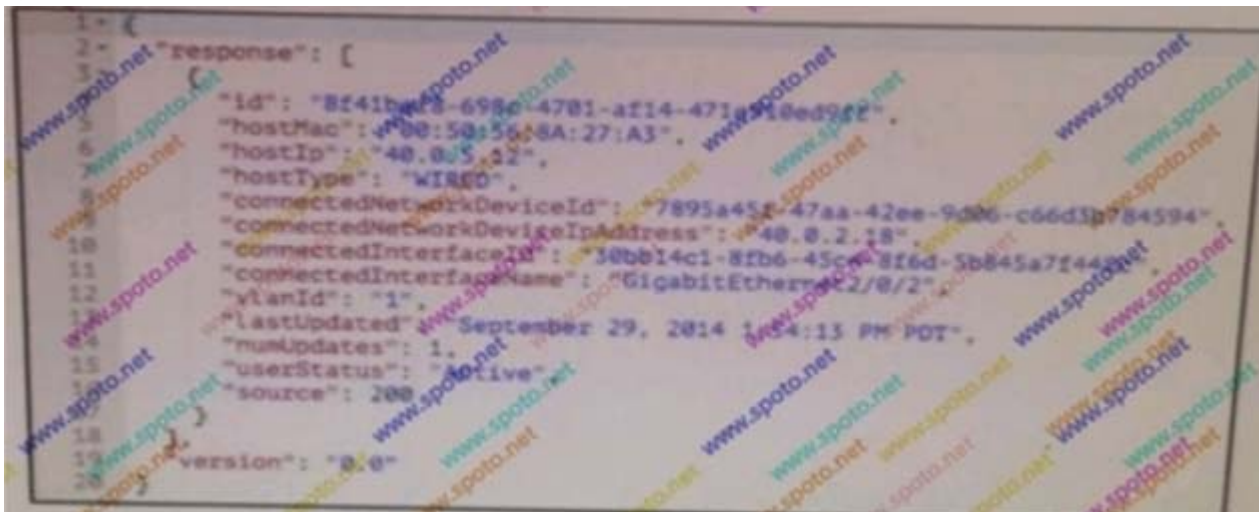
Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 4



Refer to the exhibit. Which data format is used in this REST API call?

- A. XML
- B. BASH
- C. JSON
- D. HTML
- E. HTMLv5

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 5

When the BGP additional-paths feature is used, what allows a BGP speaker to differentiate between the different available paths?

- A. The remote BGP peer prepends its own next-hop address to the prefix.
- B. A unique path identifier is encoded into a dedicated field to the NLRI.
- C. A route distinguisher is appended to the prefix by the receiving BGP speaker.
- D. The additional path information is encoded in an extended community.

Correct Answer: B

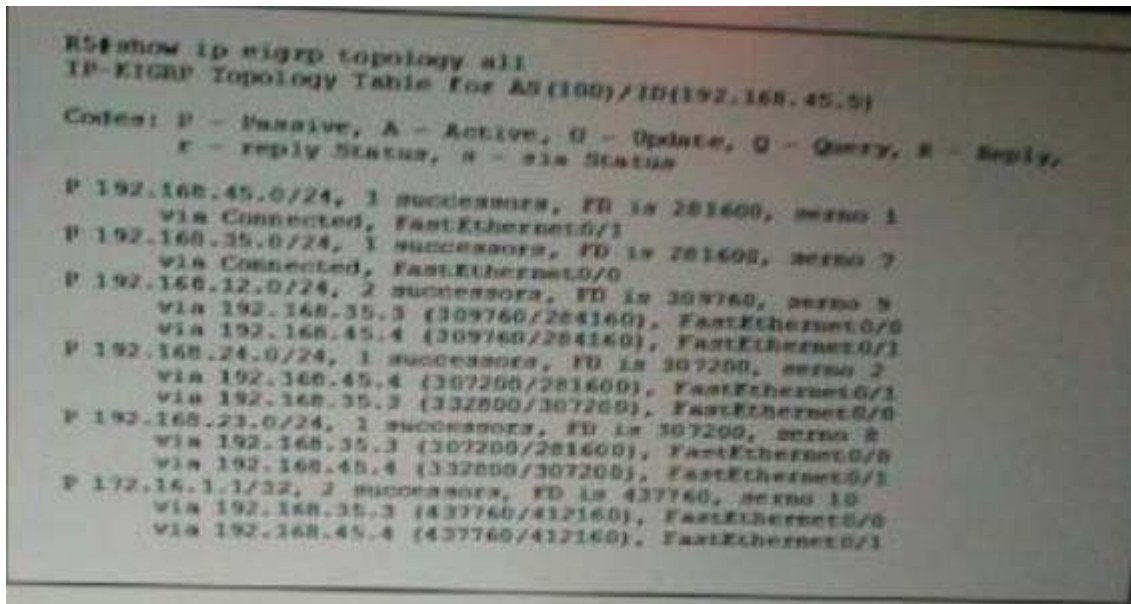
Section: (none)

Explanation

Explanation/Reference:

QUESTION 6

Refer to the exhibit. Which two statements about the 192.168.23.0/24 prefix are true? (Choose two)



- A. Router 192.168.45.4 cannot act as a feasible successor
- B. Router 192.168.35.3 is the only successor.
- C. Only router 192.168.45.4 is a feasible successor.
- D. Routers 192.168.35.3 and 192.168.45.4 are successors.
- E. Routers 192.168.35.3 and 192.168.45.4 are feasible successors.
- F. Only router 192.168.35.3 is a feasible successor.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 7

In a DMVPN solution, which component can the GRE tunnel source and destination generate automatically?

- A. pre-shared keys
- B. crypto ACLs
- C. QoS markings
- D. policy maps

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 8

Which IGMP snooping feature tracks IGMPv3 hosts on a per-port basis?

- A. IGMPv3 querier
- B. IGMPv3 static-group
- C. fast-leaveD. explicit trackin
- D. membership report

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 9

Which two options are the two main phases of PPPoE? (Choose two.)

- A. Active Discovery Phase
- B. IKE Phase
- C. Main Mode Phase
- D. PPP Session Phase
- E. Aggressive Mode Phase
- F. Negotiation Phase

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 10

If EIGRP and OSPF are configured within an administrative domain for the same network, which value can you

change so that the OSPF becomes the installed routing protocol for all routes?

- A. Local preference
- B. Metric
- C. IVIED
- D. Administrative distance
- E. Prefix length

Correct Answer: D

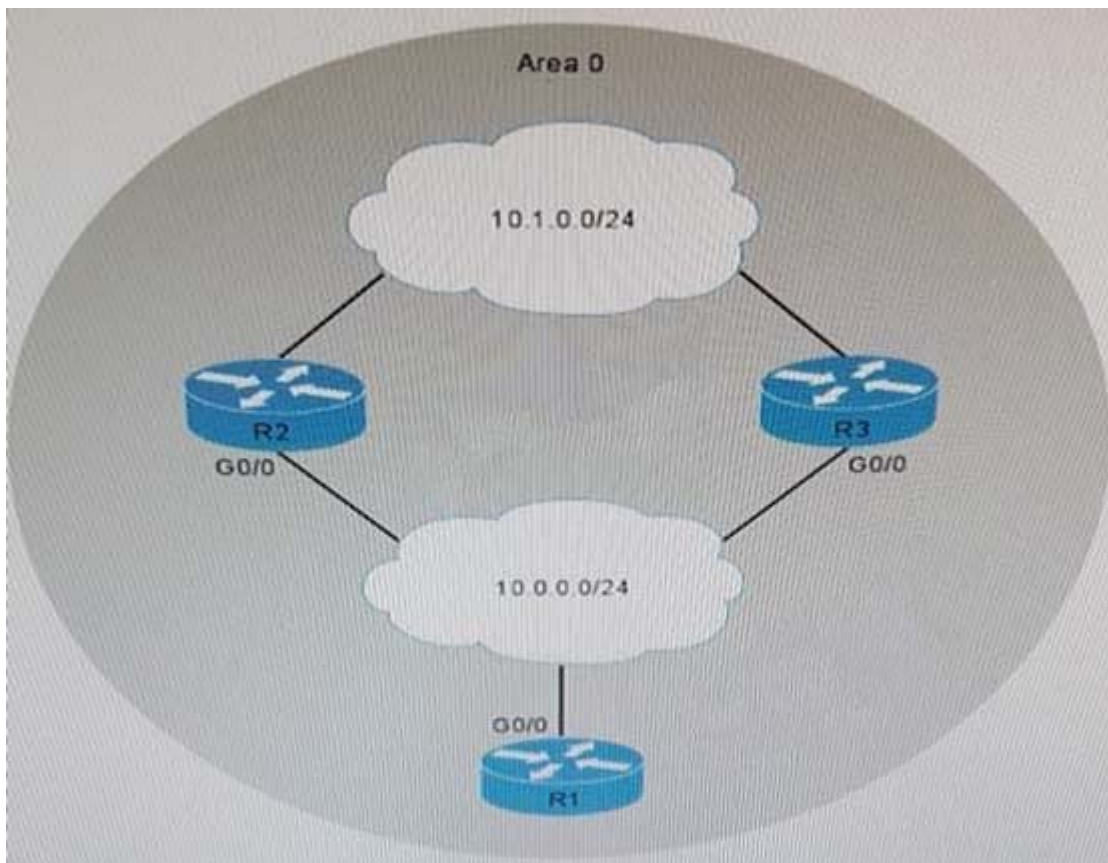
Section: (none)

Explanation

Explanation/Reference:

QUESTION 11

Refer to the exhibit. R1 has an OSPF path to R2 and R3 for 10.1.0.0/24, but R1 has a routing entry for 10.1.0.0/24 from only one router at a time. Which option is the most likely cause?



- A. The R1 maximum-path is set to 1.
- B. R2 has a higher administrative distance
- C. R2 is using a filter list.
- D. R2 is using an offset-list.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 12

What value does MAC Authentication Bypass use, by default, for the password attribute in its RADIUS Access-Request message?

- A. The MAC address of the switch
- B. The password learned from the EAP Response
- C. The MAC address of the endpoint to be authenticated
- D. The password supplied for the RADIUS server

Correct Answer: C

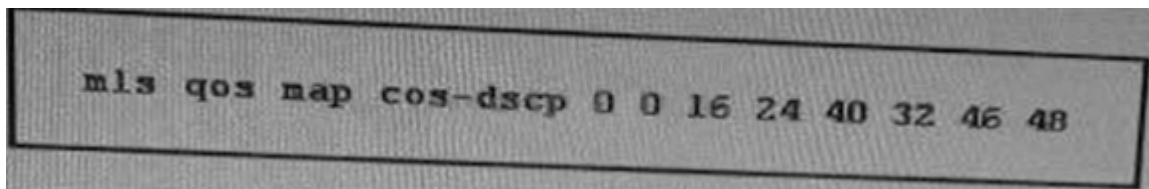
Section: (none)

Explanation

Explanation/Reference:

QUESTION 13

Refer to the exhibit. When traffic marked as CoS 5 arrives on the switch, what DSCP value does the switch apply?



- A. 0
- B. 32
- C. 40
- D. 46
- E. 48

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 14

Which two statements about PPP PAP are true? (Choose two)

- A. It requires two-way authentication.
- B. It can protect against playback attacks.
- C. It is supported only on synchronous interfaces.
- D. It is vulnerable to trial-and error attacks.
- E. Login attempts are controlled by the remote node.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 15

Which three of the following security controls would you take into consideration when implementing IoT capabilities? (Choose three.)

- A. Layered Security Approach.
- B. Place security above functionality.
- C. Define lifecycle controls for IoT devices.
- D. Privacy impact Assessment.
- E. Change passwords every 90 days.
- F. Implement Intrusion Detection Systems on IoT devices.

Correct Answer: ACD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 16

Refer to the exhibit. An Ipv6 tunnel is configured between site A and site B. Which feature does the tunnel support?



- A. single policy
- B. transport mode
- C. site-to-site tunnel mode
- D. OSPFv2

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 17

Which two statements about 6PE are true? (choose two)

- A. iBGP peering between the PE routers should be done using an IPv6 address.
- B. It does not require MPLS between the PE routers.
- C. It requires a VRF on the IPv6 interface
- D. It requires BGP to exchange labeled IPv6 unicast between PE routers
- E. Uses an IPv4-mapped IPv6 address as the IPv4 next-hop on PE router

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 18

Which two statements about IPv4 and IPv6 networks are true? (Choose two.)

- A. In IPV6, hosts perform fragmentation.
- B. IPv6 uses a UDP checksum to verify packet integrity.
- C. In IPV6, routers perform fragmentation.
- D. In IPv4, fragmentation is performed by the source of the packet.
- E. IPv4 uses an optional checksum at the transport layer.
- F. IPv6 uses a required checksum at the network layer.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 19

Which description of Infrastructure as a Service is true?

- A. a cloud service that delivers on-demand intranet connection between sites
- B. a cloud service that delivers on-demand software services on a subscription basis
- C. a cloud service that delivers on-demand internet connection between sites
- D. a cloud service that delivers on demand resources like networking and storage

Correct Answer: D

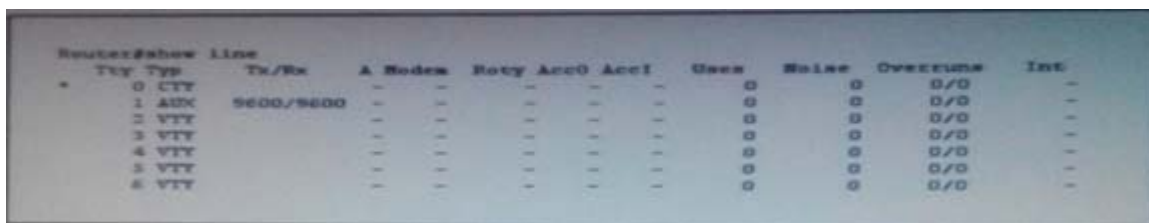
Section: (none)

Explanation

Explanation/Reference:

QUESTION 20

Refer to the exhibit. According to the given show line output, which type of line is connected to the router?



Line	Type	Speed	Modem	Roty	Acc0	Acc1	Uses	Noise	Overruns	Int
0	CTY		-	-	-	-	0	0	0/0	-
1	AUX	5600/5600	-	-	-	-	0	0	0/0	-
2	VTY		-	-	-	-	0	0	0/0	-
3	VTY		-	-	-	-	0	0	0/0	-
4	VTY		-	-	-	-	0	0	0/0	-
5	VTY		-	-	-	-	0	0	0/0	-
6	VTY		-	-	-	-	0	0	0/0	-

- A. Telnet
- B. terminal
- C. console
- D. SSH
- E. auxiliary

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 21

Which IP SLA operation type is enhanced by the use of the IP SLAs Responder?

- A. DNS
- B. HTTP
- C. ICMP Echo
- D. UDP Echo

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 22

Refer to the exhibit. With BGP always-compare-med enabled, which BGP entry is installed in the RIB?

Entry1: AS (PATH) 400 , med 150, external , rid 2.2.2.2
Entry2: AS (PATH) 100 , med 200, external , rid 1.1.1.1
Entry3: AS (PATH) 400 , med 100, external , rid 3.3.3.3

- A. Entry 1 because it was installed first (oldest) in the BGP table.
- B. Entry 1 because it has the best IVIED of the external routes.
- C. Entry 2 because it has the lowest router ID.
- D. Entry 3 because it has the lowest MED.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 23

Which statement about a Cisco APIC controller versus a more traditional SDN controller is true?

- A. APIC uses a policy agent to translate policies into instructions.
- B. APIC supports OpFlex as a Northbound protocol.
- C. APIC does support a Southbound REST API
- D. APIC uses an imperative model

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 24

Which two statements about CEF polarization are true? (Choose two)

- A. The AND operation is performed on the higher-order bits of the source and destination IP address
- B. A single link is chosen for all flows
- C. The AND operation is performed on the lower-order bits of the source and destination IP address
- D. After the XOR process, the flow is processed in the distribution Layer with a different hashing algorithm
- E. It can be prevented by alternating the hashing inputs
- F. When enabled, it allows all links to be used efficiently for different traffic flows

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 25

Refer to the exhibit. Which two route types are advertised by a router with this configuration? (Choose two)

```
router eigrp 1
network 10.0.0.0
eigrp stub
```

- A. static
- B. summary
- C. connected
- D. redistributed
- E. external

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 26

With which protocol is CoAP designed to be used?

- A. TCP
- B. SNMP
- C. UDP
- D. XMPP

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 27

Which two methods can you use to limit the range for EIGRP queries? (Choose two.)

- A. Use an access list to deny the multicast address 224.0.0.1 outbound from select EIGRP neighbor and permit everything else.
- B. Configure route tagging for all EIGRP routes.
- C. Summarize routes at the boundary routers of the EIGRP domain.
- D. Configure unicast EIGRP on all routers in the EIGRP domain.
- E. Configure stub routers in the EIGRP domain.
- F. Use an access list to deny the multicast address 224.0.0.10 outbound from select EIGRP neighbors and permit everything else.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 28

Which command address learning on the configures port security on a switch to enable permanent MAC interface?

- A. switchport port-security mac-address-learning enable
- B. switchport port-security mac-address timer 0
- C. switchport port-security mac-address sticky
- D. switchport port-security mac-address maximum 1 sticky
- E. switchport port-security mac-address permanent

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 29

Which three values are used to generate a unique bridge ID for each VLAN in PVST+? (Choose three)

- A. port cost
- B. max age
- C. spanning-tree MAC address
- D. port priority
- E. switch priority
- F. extended system ID

Correct Answer: CEF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 30

Which three criteria are used for stackwise election of a master switch? (Choose three.)

- A. VLAN revision number
- B. longest uptime
- C. highest MAC address
- D. user-selected priority
- E. IOS version number
- F. lowest MAC address

Correct Answer: BDF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 31

Which three statements are true about PPP CHAP authentication? (Choose three.)

- A. PPP encapsulation must be enabled globally.
- B. The LCP phase must be complete and in closed state.
- C. The hostname used by a router for CHAP authentication cannot be changed.
- D. PPP encapsulation must be enabled on the interface.
- E. The LCP phase must be complete and in open state.
- F. By default, the router uses its hostname to identify itself to the peer.

Correct Answer: DEF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 32

Which two features are incompatible with Loop Guard on a port? (Choose two.)

- A. Root Guard
- B. PortFast
- C. UplinkFast
- D. BackboneFast
- E. BPDU skew detection

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 33

Which IPv6 first-hop security feature blocks traffic sourced from IPv6 addresses that are outside the prefix gleaned from router advertisements?

- A. IPv6 RA guard
- B. IPv6 DHCP guard
- C. IPv6 source guard
- D. IPv6 prefix guard

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 34

Which command can you enter on an interface so that the interface will notify the sender of a packet that the packet that the path is sub-optimal?

- A. ip nhrp record
- B. ip nhrp set-unique-bit
- C. ip nhrp shortcut
- D. ip nhrp redirect
- E. ip nhrp cost 65535

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 35

Which two statements about MLD snooping are true? (Choose two)

- A. MLD protocol messages can be sent in both IGMPv4 and ICMPv6 formats.
- B. It supports private VLANs.
- C. It limits the Layer 2 multicast traffic that is generated by routing protocols.
- D. The MLD snooping querier requires the VLAN interface to be configured with an IPv6 address.
- E. PFC modes support MLD version 2 only

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 36

Which effect of configuring the passive-interface S0/0 command under the EIGRP routing process is true?

- A. It prevents EIGRP neighbor relationships from being formed over interface S0/0.
- B. It configures interface S0/0 to send hello packets with the passive-interface bit set.
- C. It configures interface S0/0 to suppress all outgoing routing updates.
- D. It configures interface S0/0 to reject all incoming routing updates.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 37

Which action can you take to avoid suboptimal routing on an EIGRP network?

- A. Use tags to filter routes outbound.
- B. Use the distribute-list command to filter routes inbound.
- C. Summarize outbound prefixes.
- D. Redistribute connected and static routes.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 38

What is the modified EUI-64 value corresponding to MAC address 0032.F4C5.7781 as used in IPv6?

- A. FFFE.0032.F4C5.7781
- B. C577.81 FF.FE00.32F4
- C. 0032. F4C5.7781. FFFE
- D. 0032.F4FF.FEC5.7781

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 39


```

!
router bgp 65500
  neighbor LocalSite ebgp-multi-hop 2
  neighbor LocalSite update-source Loopback 0
  neighbor LocalSite next-hop-self
  neighbor LocalSite route-map CheckCommunity in
  neighbor LocalSite route-map CPodPeer out
!
route-map CPodPeer permit 10
  match as-path 1
!
route-map CPodPeer permit 15
  match as-path 33
!
route-map CPodPeer deny 30
!
ip as-path access-list 1 permit ^$
ip as-path access-list 33 permit _65006$

```

Refer to the exhibit. This router is advertising which routes via BGP?

- A. no routes
- B. BGP routes that originated from AS 65006 and BGP routes that originated on this router
- C. all routes
- D. BGP routers sourced on this router
- E. all BGP routes from AS 65006

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 40

Refer to the exhibit. Which two statements about this capture are true? (Choose two)

```

R1#show monitor capture status
Load for five secs: 0%/0%; one minute: 0%; five minutes: 0%

capture state      : ON
  [running for 00:03:26.860]
capture mode       : Circular [wrap count = 0 ]
Number of packets
  captured : 201
  dropped   : 0
  received  : 591
Capture will stop after 00:01:33

```

- A. It is set to run for five minutes.
- B. It continues to capture data after the buffer is full
- C. It is set to run for a period of 00:03:26.

- D. It captures data only until the buffer is full.
- E. It is set to use the default buffer type.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 41

How is the TCAM on a Catalyst switch used when VRF-Lite is configured?

- A. Each configured routing protocol receives its own Layer 3 TCAM
- B. Each configured VRF receives its own Layer 3 TCAM
- C. Layer 3 TCAM is not used in VRF-Lite configurations.
- D. All configured VRFs share the Layer 3 TCAM

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 42

Which two statements are true about VPLS? (Choose two.)

- A. It can work over any transport that can forward IP packets.
- B. It provides integrated mechanisms to maintain First Hop Resiliency Protocols such as HSRP, VRRP, or GLBP.
- C. It includes automatic detection of multihoming.
- D. It relies on flooding to propagate MAC address reachability information.
- E. It can carry a single VLAN per VPLS instance.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 43

Refer to the exhibit. R1 and R2 have been configured as BGP neighbor, but their session is stuck in active. Which action can you take that will enable a session to be established?

```

R1#show ip bgp summary
BGP router identifier 10.1.1.1, local AS number 65530
BGP table version is 1, main routing table version 1

Neighbor      V    AS  MsgRcvd  MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
10.1.12.2      4  65530      11       11        0    0    0  00:08:00  Active

R1#show ip route | in 10.1.12.0
C      10.1.12.0/24 is directly connected, FastEthernet0/0

R1#show run | section router bgp
router bgp 65530
  no synchronization
  bgp router-id 10.1.1.1
  bgp log-neighbor-changes
  neighbor 10.1.12.2 remote-as 65530
  neighbor 10.1.12.2 update-source Loopback0
  no auto-summary

R2#show ip bgp summary
BGP router identifier 10.2.2.2, local AS number 65530
BGP table version is 1, main routing table version 1

Neighbor      V    AS  MsgRcvd  MsgSent  TblVer  InQ  OutQ  Up/Down  State/PfxRcd
10.1.12.1      4  65530      11       89        0    0    0  00:41:39  Active

```

- A. Enable synchronization on R1 and R2.
- B. Issue the neighbor 10.1.12.2 activate command on R1.
- C. Configure 10.1.12.1 as the BGP router ID on R1
- D. Configure a neighbor relationship with Loopback0 address of R1 on R2

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 44

Which two events occur when a packet is decapsulated in a GRE tunnel? (Choose two.)

- A. The destination IPv4 address in the IPv4 payload is used to forward the packet.
- B. The TTL of the payload packet is decremented.
- C. The source IPv4 address in the IPv4 payload is used to forward the packet.
- D. The TTL of the payload packet is incremented.
- E. The version field in the GRE header is incremented.
- F. The GRE keepalive mechanism is reset.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 45

<https://mydevice.mycompany.com/getstuff?queryName=error&queryResults=yes>

Refer to the exhibit. Which network script automation option or tool is used in the exhibit?

- A. EEM
- B. Python
- C. Bash script
- D. NETCONF

E. REST

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 46

Which two conditions must be met before IS-IS Level 1 routers will become adjacent? (Choose two.)

- A. The routers must share a common Autonomous System Number.
- B. The router must share a common process ID.
- C. The router must be in different areas.
- D. The routers must share a common network segment.
- E. The routers must be configured with the neighbor command.
- F. The routers must be in the same area.

Correct Answer: DF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 47

Which two options are interface requirements for turbo flooding? (Choose two.)

- A. The interface is Ethernet.
- B. The interface is configured for ARPA encapsulation.
- C. The interface is PPP.
- D. The interface is configured for GRE encapsulation.
- E. The interface is configured for 802.1 Q encapsulation.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 48

Which two options are purposes of MSDP SA filtering? (Choose two.)

- A. to allow the filtering of PIM messages between peers
- B. to allow all SA message to be processed by MSDP peers
- C. to improve the scalability of an MSDP multicast environment
- D. to reduce the number of multicast address that are shared to MSDP peers
- E. to allow the filtering of IGMP messages between peers
- F. to reduce the number of multicast address that are distributed to other devices in the same multicast domain

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 49

Which statement about route summarization is true?

- A. EIGRP can summarize routes at the classful network boundary
- B. EIGRP and RIPv2 route summarize are configured with the ip summary-address command under the route process.
- C. It can be disabled in RIP, RIPv2 and EIGRP
- D. RIPv2 can summarize-routes beyond the classful network boundary

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 50

Which option is an example of SaaS?

- A. Microsoft Azure
- B. Google Apps
- C. Amazon AWS
- D. Google App Engine

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 51

Which statements about PMTUD is true?

- A. It is supported by TCP and UDP.
- B. It increases the connection's send MSS value to prevent fragmentation.
- C. GRE tunnels use PMTUD to fragment data packets by default.
- D. It is used to prevent fragmentation of packets at the endpoint of a TCP connection.
- E. It is used to prevent fragmentation of packets traveling across a smaller MTU link between two endpoints.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 52

Which two statements about IS-IS metrics are true? (Choose two)

- A. The default metric style is narrow
- B. The default metric for the IS-IS interface is 63
- C. The default metric style is wide
- D. The default metric for the IS-IS interface is 6
- E. The default metric for the IS-IS interface is 10

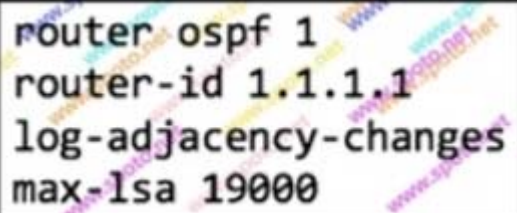
Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 53



```
router ospf 1
router-id 1.1.1.1
log-adjacency-changes
max-lsa 19000
```

Refer to the exhibit. Which statement about the functionality of this configuration is true?

- A. The router does not accept nonself-generated LSAs once a maximum of 19000 is reached unless the router is an ABR
- B. The router does not accept nonself-generated LSAs once a maximum of 19000 is reached
- C. The router does not accept nonself-generated LSAs once a maximum of 19000 is reached unless the router is in area 0
- D. The router does not accept nonself-generated LSAs once a maximum of 19000 is reached unless the router is an ASBR!

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 54

Which statement about STP port states is true?

- A. A port in the blocking state remains in that state for 30 seconds before transitioning to the listening state.
- B. Listening and learning are transitory port states that use the forward delay timer.
- C. When a port transitions to the learning state, it can send and receive data frames.
- D. A port in the blocking state learns address and receives BPDUs.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 55

Which information is contained in an OSPF Type 1 Router LSA?

- A. The Autonomous System Border Routers(ASBR) for the OSPF network and the cost of the path to reach each ASBR
- B. The router's interfaces(links) on which OSPF is enabled, the state and outgoing cost of each link, and the OSPF neighbors on each link
- C. The network links to all known OSPF routers and the cost of each path
- D. The Area Border Routers (ABR) for the area and the cost of the path to each ABR
- E. The OSPF neighboring routers and the cost of the outgoing link to reach each neighbor

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 56

Which type of port would have root guard enabled on it?

- A. a root port
- B. an alternate port
- C. a blocked port
- D. a designated port

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 57

Which three modes are valid for forming an EtherChannel between the ports of two switches? (Choose three.)

- A. auto/auto
- B. desirable/on
- C. active/passive
- D. auto/desirable
- E. passive/passive
- F. active/active

Correct Answer: CDF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 58


```

ICMP statistics:
Rcvd: 0 format errors, 0 checksum errors, 0 redirects, 0 unreachable
      0 echo, 405 echo reply, 0 mask requests, 0 mask replies, 0 parameter,
      0 timestamp, 0 info request, 0 other, 0 irmp solicitations, 0 irmp
      advertisements
Sent: 0 redirects, 0 unreachable, 406 echo, 0 echo reply, 0 mask requests,
      0 mask replies, 0 quench, 0 timestamp, 0 info reply, 0 time exceeded,
      0 parameter problem, 0 irmp solicitations, 0 irmp advertisements
  
```

Refer to the exhibit. While troubleshooting a connectivity issue, you executed a traceroute that returned the given output. Which conclusion can you draw about the problem?

- A. The PDUs transmitted errors
- B. Packets are being fragmented
- C. An ACL is blocking traffic
- D. The destination is too busy

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 59

Which option describes a difference between Ansible and Puppet?

- A. Ansible is client-server based, and Puppet is not.
- B. Ansible requires an agent, and Puppet does not.
- C. Ansible is Python based, and Puppet is Ruby based.
- D. Ansible automates repetitive tasks, and Puppet allows you to run plain ssh command.

Correct Answer: C

Section: (none)

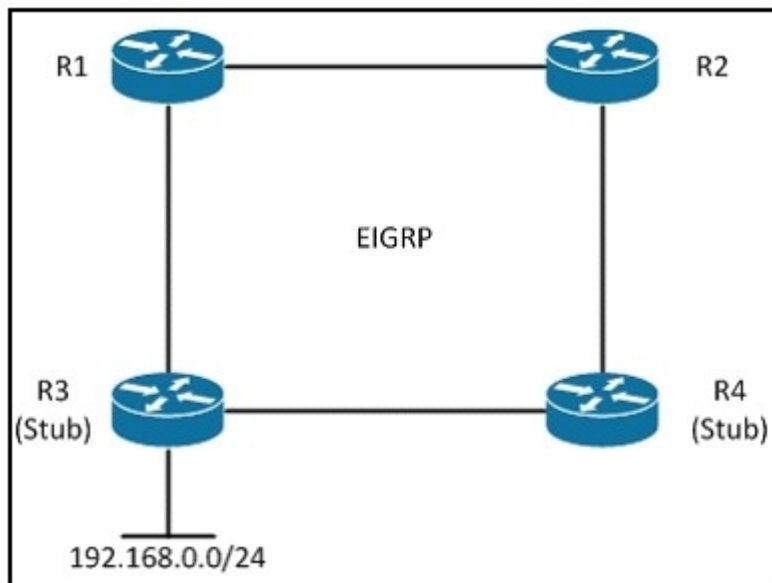
Explanation

Explanation/Reference:

QUESTION 60

Refer to the exhibit. All routers are running EIGRP and the network has converged.

R3 and R4 are configured as EIGRP Stub.if the link between R1 and R3 goes down, which statement is true?



- A. R1 sends traffic destined to 192.168.0.100 via R2
- B. R2 does not have a route to 192.168.0.0/24 in the routing table
- C. The prefix 192.168.0.0/24 becomes stuck-in-active on R4
- D. R3 does not advertise 192.168.0.0/24 to R4 anymore

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 61

Which two statements about the passive-interface command EIGRP are true? (Choose two)

- A. It configures the device to advertise only connected interfaces to neighbors with EIGRP.
- B. It configures the interface to use unicast messages to establish EIGRP neighbor relationships.
- C. It allows incoming routing updates to be received but disables outgoing routing updates.
- D. It disables processing of incoming hello messages.
- E. If it is enabled globally under EIGRP on the device, it can be disabled for individual interfaces to allow those interfaces to remain active.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 62

Refer to the exhibit. After you apply the given configurations to R1 and R2, which networks does R2 advertise to R1?

```

R1
interface FastEthernet0/0
  ip address 192.168.12.1 255.255.255.0

router rip
  version 2
  network 192.168.12.0

R2
interface FastEthernet0/0
  ip address 192.168.12.2 255.255.255.0
  ip summary-address rip 172.16.32.0 255.255.240.0

interface FastEthernet0/1
  ip address 172.16.33.2 255.255.255.0

router rip
  version 2
  network 172.16.0.0
  network 192.168.12.0

```

- A. both 172.16.32.0/20 and 172.16.33.0/24
- B. 172.16.32.0/20 only
- C. 172.16.0.0/16 only
- D. 172.16.33.0/24 only

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 63

In an MPLS-VPN environment, what is the effect of configuring an identical set of route targets for a particular VRF but then configuring a nonidentical RD across multiple PE devices?

- A. The routes are rejected by the remote PE because they have a different RD than its routes.
- B. The routes are correctly managed by the control plane, but there are instances where routes take up twice as much memory.
- C. The routes are not sent to any remote PE with a different RD.
- D. The routes propagate to the remote PE, but the PE never installs them in its forwarding table.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 64

Which two statements about route poisoning are true? (Choose two)

- A. It prohibits a route from being advertised out an interface from which
- B. It is supported on RIP, IGRP, and EIGRP networks
- C. It can be used in conjunction with holddowns to prevent routing loops
- D. It is used with distance-vector routing protocols
- E. In RIP, a metric of 15 is assigned to the route

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 65

What feature can a device use to identify other members of the same IPv6 multicast group on a network segment?

- A. MLD
- B. MSDP
- C. source-specific multicast
- D. rendezvous points

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 66

Which command can you enter to configure a built-in policer with minimum guaranteed bandwidth without starving other classes during periods of congestion?

- A. bandwidth remaining percent
- B. bandwidth
- C. priority percent
- D. fair-queue

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 67

Which two options are requirements for Control-Plane Policing? (Choose two.)

- A. Cisco Express Forwarding must be enabled globally.
- B. Cisco Discovery Protocol must be disabled in the control plane.
- C. A crypto policy must be installed.

- D. A loopback address must be configured for device access.
- E. A class map must be configured to identify traffic.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 68

Which BGP feature allows a router to maintain its current BGP configuration while it advertises a different AS number to new connections?

- A. local-AS
- B. next-hop-self
- C. allow-AS in
- D. soft reset

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 69

Refer to the exhibit. Which part of the joined group addresses list indicates that the interface has joined the EIGRP multicast group address?

```
R2#show ipv6 interface e0/0
Ethernet0/0 is up, line protocol is up
IPv6 is enabled, link-local address is FE80::A8BB:CCFF:FE00:200
No Virtual link-local address(es):
No global unicast address is configured
Joined group address(es):
  FF02::1
  FF02::2
  FF02::A
  FF02::1:FF00:200
```

- A. FF02::1
- B. FF02::1:FF00:200
- C. FF02::A
- D. FF02::2

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 70

What is the relationship between NETCONF and YANG?

- A. NETCONF uses YANG as a secure transport mechanism
- B. NETCONF uses YANG start and end tags to delineate element content
- C. NETCONF uses YANG models to define objects and data
- D. NETCONF uses YANG messages to communicate with devices

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 71

Which three session tables does NAT64 maintain?

- A. 6rd
- B. TCP
- C. 464XLAT
- D. ICMP Query
- E. SIP
- F. UDP

Correct Answer: BDF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 72

What is the source MAC address of a BPDU frame that is sent out of a port?

- A. the lowest MAC address on the switch
- B. the highest MAC address on the switch
- C. the MAC address of the individual port that is sending the BPDU
- D. the same as the MAC address in the bridge ID

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 73

When is it most important to implement multiple synonymous area addresses on an IS-IS network?

- A. when integrating an IS-IS Layer 2 router with another routing protocol
- B. when an IS-IS router is merging routing information
- C. when splitting areas in the IS-IS domain
- D. when merging or splitting areas in the IS-IS domain

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 74

Which neighbor-discovery message type is used to verify connectivity to a neighbor when the link-layer address of the neighbor is known?

- A. neighbor solicitation
- B. neighbor advertisement
- C. router advertisement
- D. router solicitation

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 75

Refer to the exhibit. Which two effects of this configuration are true? (Choose two.)

```
Switch(config)# mls qos srr-queue input priority-queue 2 bandwidth 0
Switch(config)# mls qos srr-queue input bandwidth 4 2
```

- A. The priority queue is disabled.
- B. Queue 1 is allocated 4 percent of the available bandwidth and queue 2 is allocated 2 percent of the available bandwidth.
- C. Queue 1 is a priority queue that is allocated 1/3 of the available bandwidth.
- D. Queue 1 is served twice as fast as queue 2.
- E. Queue 1 is a priority queue that is allocated 2/3 of the available bandwidth.
- F. Queue 2 is served twice as fast as queue 1.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 76

Which two statements about the EIGRP Over the Top feature are true? (Choose two.)

- A. EIGRP routers traffic between the PE devices.
- B. Traffic is LISP-encapsulated on the control plan
- C. The neighbor command must be configured with LISP encapsulation on each CE device
- D. The network statement must be configured on each PE device to connect separate EIGRP sites.
- E. The network statement must be configured on each CE device to connect separate EIGRP sites.
- F. Traffic is LISP-encapsulated on the data plan

Correct Answer: CF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 77

which feature can be used to allow hosts with routes in the global routing table to access hosts in a VRF?

- A. address families
- B. extended communities
- C. route target communities
- D. route leaking

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 78

Refer to the exhibit. Which statement is true?

```
R1#show mpls l2transport vc 100 detail
Local interface: Fa2/6 up, line protocol up, Ethernet up
  Destination address: 2.2.2.3, VC ID: 100, VC status: up
    Preferred path: Tunnel1, active
    Default path: ready
    Tunnel label: 12307, next hop point2point
    Output interface: Tu1, imposed label stack {12307 20}
  Create time: 00:00:11, last status change time: 00:00:11
  Signaling protocol: LDP, peer 2.2.2.3:0 up
    MPLS VC labels: local 21, remote 20
    Group ID: local 0, remote 2
    MTU: local 1500, remote 1500
    Remote interface description:
  Sequencing: receive disabled, send disabled
  VC statistics:
    packet totals: receive 1, send 6
    byte totals:   receive 368, send 0
    packet drops:  receive 0, send 0
```

- A. R1 routes this pseudowire over MPLS TE tunnel 1 with transport label 20.
- B. The default route 0.0.0.0/0 is available in the IPv4 routing table
- C. R1 is using an MPLS TE tunnel for this pseudowire, because the IP path is not available
- D. R1 has preferred-path configured for the pseudowire.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 79

Which two conditions can cause unicast flooding? (Choose two)

- A. forwarding table overflow
- B. recurring TCNs
- C. symmetric routing
- D. RIB table overflow
- E. multiple MAC addresses in the Layer 2 forwarding table

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 80

Which three operations are valid NETCONF operations? (Choose three)

- A. set-config
- B. get-config
- C. rollback
- D. get
- E. set
- F. edit-config

Correct Answer: BDF

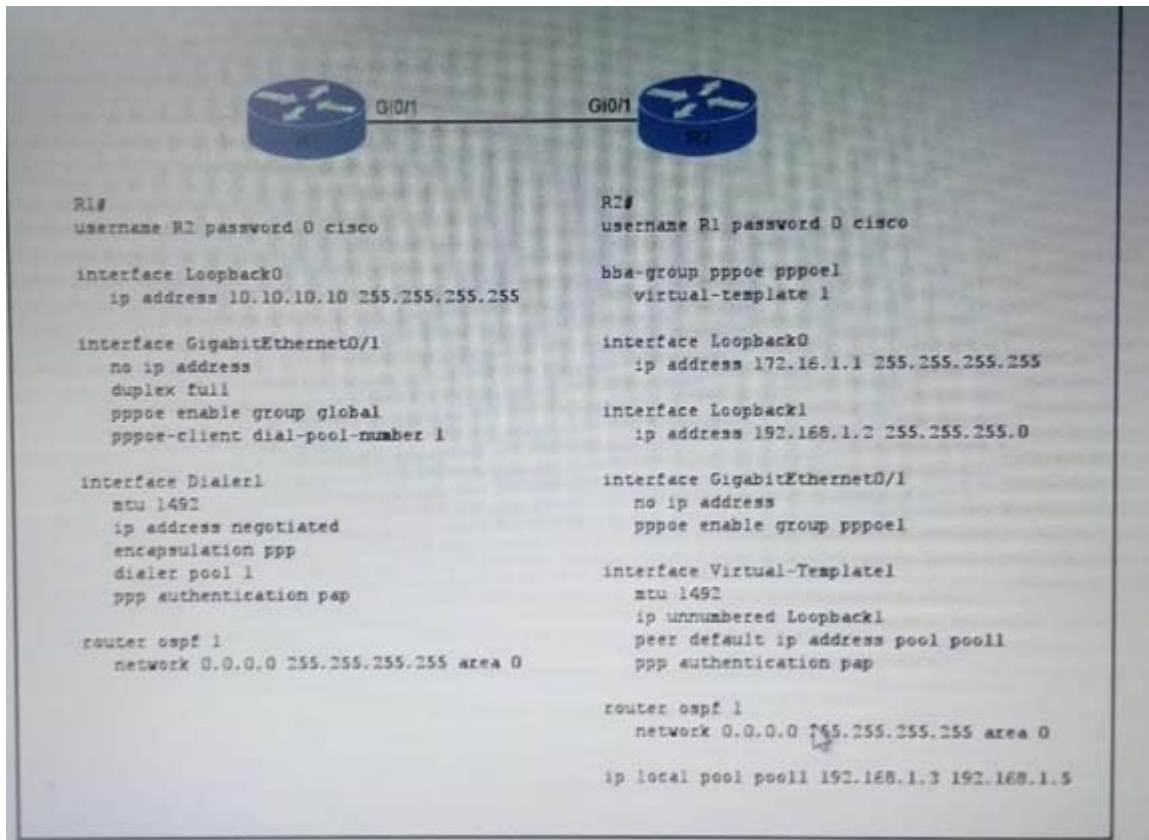
Section: (none)

Explanation

Explanation/Reference:

QUESTION 81

Refer to the exhibit. If R1 and R2 cannot establish an OSPF neighbor relationship, which two actions can you take to resolve the problem?(choose two)



- A. Change the PPP authentication to CHAP authentication
- B. Change the ip local pool command on R2 to ip local pool pool1 192.168.1.2 192.168.1.5
- C. Configure R1 to send the username and password on the Dialer 1 interface
- D. Configure PPP encapsulation under the R1 virtual - template interface
- E. Configure PPP authentication under the R2 GigabitEthernet0/1 interface

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 82

Which two statements are true about control plane policing? (Choose two.)

- A. Control plane policing will affect only traffic that is destined to the route processor.
- B. Access lists that are used in policies for control plane policing must not use the log keyword.
- C. Access lists that use the deny rule in control plane policing do not progress to the next class.
- D. The log keyword can be used but the log-input keyword must not be used in policing.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 83

Refer to the exhibit. What happens to a TCP packet that is received on interface GigabitEthernet 0/0/0.100, which has DF bit set to 1, and packet has a valid destination?

```
!
ip access-list extended list1
  deny tcp any any
  permit ip any any
!
route-map foo permit 50
  match ip address list1
  set ip df 0
!
interface GigabitEthernet0/0/0.1000
  description *** VLAN 1000 ***
  encapsulation dot1Q 1000 native
  ip address 10.1.1.3 255.255.255.0
  ip policy route-map foo
  service-policy input marking
!
```

- A. The packet is not matched by route-map foo and the DF bit is left as it was
- B. The packet is matched by route-map foo and the DF bit is left as it was
- C. The packet is matched by route-map foo and the DF bit is set to 0
- D. The packet is not matched by route-map foo and the DF bit is set to 0

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 84

You are configuring CoS-to-DSCP mappings with three requirements:

- *COS 1 must be translated into AF13.
- *COS 2 must be translated into AF22.
- *COS 5 must be translated into EF.

Which configuration command can you use to implement the requirements?

- A. mis qos map cos-dscp 0 10 18 24 32 46 48 56
- B. mis qos map cos-dscp 0 12 18 24 32 46 48 56
- C. mis qos map cos-dscp 0 14 20 24 32 46 48 56
- D. mis qos map cos-dscp 0 12 18 24 32 40 46 56

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 85

Which statement is true about trunking?

- A. Cisco switches that run PVST+ do not transmit BPDUs on nonnative VLANs when using a dot1q trunk.
- B. DTP only supports autonegotiation on 802.1q and does not support autonegotiation for ISL.
- C. DTP is a point-to-point protocol.
- D. When removing VLAN 1 from a trunk, management traffic such as CDP is no longer passed in that VLAN.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 86

```
interface fastethernet 0/0
ip address 10.1.1.1 255.255.255.0
ip ospf authentication message-digest
ip ospf network point-to-point
ip ospf priority 2
ip ospf area 1
```

Refer to the exhibit. Which change must you make to this configuration to enable the router to participate in a DR election?

- A. Configure the interface to be in area 0
- B. Increase the OSPF priority for the interface
- C. Remove authentication
- D. Change the OSPF network type

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 87

What is the reason to send EIGRP SIA reply to a peer?

- A. to respond to an SIA query that the router is still waiting on replies from its peers
- B. to respond to a reply reporting that the prefix has gone stuck-in-active
- C. to respond to a query reporting that the prefix has gone stuck-in-active
- D. to respond to an SIA query with the alternative path requested

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 88

Refer to the exhibit. The router sets local-preference to which option when it receives a BGP route with a community string 1000:130 from a neighbor in the LocalSite peer-group?

```
router bgp 65500
  neighbor LocalSite peer-group
  neighbor LocalSite ebgp-multihop 2
  neighbor LocalSite update - source Loopback0
  neighbor LocalSite next-hop-self
  neighbor LocalSite route-map CheckCommunity in
  neighbor LocalSite route-map CPodPeer out
!
route-map CheckCouuuunity permit 8
  match community 8
  set local-preference 80
!
route-map CheckCouuuunity permit 10
  match community 1
  set local-preference 110
!
route-map CheckCouuuunity permit 30
!
ip community-list 1 permit 1000:100
ip community-list 3 permit 1000:130
ip community-list 8 permit 1000:80
```

- A. 80
- B. 110
- C. 130
- D. no setting
- E. the default value Correct

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 89

IS-IS Level-1 Link State Database:						
LSPID	SP	Seq Num	LSP Checksum	LSP	Holdtime/Rcvd	ATT/P/OL
r1.00-00		0x0000284D	0xD750		952/1198	0/0/0
r1.03-00		0x000023F9	0x5146		492/1198	0/0/0
r1.04-00		0x000023FF	0x3E52		1133/1198	0/0/0
r2.00-00	*	0x00002841	0x878E		839/*	0/0/0
r2.01-00	*	0x000023FC	0x79FC		858/*	0/0/0
r2.02-00	*	0x00002417	0x381F		810/*	0/0/0
r3.00-00		0x00002846	0x6D6E		1137/1198	0/0/0
r3.01-00		0x00002840	0x44C9		981/1198	0/0/0
r3.02-00		0x00002843	0x37D2		552/1198	0/0/0

Refer to the exhibit. What is the meaning of the asterisk (*) in the LSP Seq Num column of this "show isis database" output?

- A. The LSP originated on a router with an invalid hold time
- B. The LSP originated on a L1-L2 type router
- C. The LSP originated on the router where the command is being executed
- D. The LSP originated on a router which is capable of wide metrics

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 90

Which two statements about NAT are true? (Choose two)

- A. Static NAT supports a one-to-one address mapping
- B. Dynamic NAT allows hosts inside a network to use a pool of addresses to access hosts outside the network
- C. PAT uses destination port numbers identity address mappings
- D. Static NAT release the translated address for use by another device when it is inactive
- E. One-to-one mapping denies outside traffic from accessing an inside host

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 91

Which two statements about IPv6 6to4 tunnels are true? (Choose two)

- A. Sites use addresses from the 2002::/16 prefix
- B. Sites use addresses from link-local scope
- C. They are point-to-multipoint tunnels
- D. They are point-to-point tunnels
- E. They rely on GRE encapsulation

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 92

Which two EtherChannel modes can create an LACP EtherChannel? (Choose two)

- A. on
- B. active
- C. passive
- D. auto
- E. desirable

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 93

Which trunking configuration between two Cisco switches can cause a security risk?

- A. configuring different native VLANs on the switches
- B. configuring different trunk modes on the switches
- C. configuring mismatched VLANs on the trunk
- D. disabling DTP on the trunk ports
- E. configuring incorrect channel-groups on the switches

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 94

Which two statements about OSPF route filtering are true? (Choose two)

- A. It can be based on the source router ID.
- B. It can be based on the external route tag.
- C. It affects LSA flooding.
- D. It can be based on the as-path.
- E. It can be based on distance.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 95

Which set of commands conditionally advertises 172.16.0.0/24 as long as 10.10.10.10/32 is in the routing

table?

- A.

```
neighbor x.x.x.x advertise-map ADV exist-map EXT
route-map ADV
  match IP address prefix-list ADV
!
route-map EXT
  match IP address prefix-list EXT
!
ip prefix-list EXT permit 172.16.0.0/24
!
ip prefix-list ADV permit 10.10.10.10/32
```
- B.

```
neighbor x.x.x.x advertise-map ADV exist-map EXT
route-map ADV
  match IP address prefix-list ADV
!
route-map EXT
  match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```
- C.

```
neighbor x.x.x.x advertise-map ADV
route-map ADV
  match IP address prefix-list ADV
  match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```
- D.

```
neighbor x.x.x.x advertise-map ADV
route-map ADV
  match IP address prefix-list ADV
  match IP address prefix-list EXT
!
ip prefix-list ADV permit 172.16.0.0/24
!
ip prefix-list EXT permit 10.10.10.10/32
```

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 96

Which option describes how the IP address is assigned when you configure a Layer 3 EtherChannel interface?

- A. You must assign the IP address to the tunnel interface.
- B. The last IP address added to the EtherChannel is used automatically.
- C. You must assign the IP address to a port channel logical interface.
- D. The first IP address added to the EtherChannel is used automatically.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 97

A network engineer implements ISIS for IPv6 and then discovers that ISIS adjacencies are going down. Which action can be taken to fix this problem?

- A. Enable multitopology on the ISIS domain
- B. Configure link local IPv6 addresses on ISIS interfaces
- C. Change the is-type on all ISIS routers to level-2-only
- D. Enable ISIS for IPv6 on loopback interfaces.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 98

Which statement about Cisco Express Forwarding are true?

- A. The FIB table resides on the route processor and the adjacency table resides on the line cards when Cisco Express Forwarding is enabled.
- B. The FIB table and the adjacency table reside on the line cards when Cisco Express Forwarding is enabled.
- C. Layer 2 next-hop address information is maintained in the adjacency table.
- D. Layer 2 next-hop address information is maintained in the FIB table.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 99

For which reason can two OSPF neighbor routers on the same LAN segment be stuck in the two-way state?

- A. The two routers have different MTUs on the interface.
- B. The two routers are configured with different priorities.
- C. The interface priority is set to zero on both routers.
- D. Both routers have the same OSPF router ID.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 100

Which two statements about TCP tail drop are true? (Choose two)

- A. It increases the congestion window after each acknowledgement
- B. It uses bandwidth efficiently along the entire link
- C. It causes TCP flows to be dropped at different intervals
- D. It decreases the congestion window after each acknowledgement
- E. It causes TCP global synchronization

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 101

Refer to the exhibit. The route-map wan2site is being used for redistributing BGP routes into the eigrp 28 process. Which option best describes the resulting redistribution of routes?

```
router eigrp 28
network 172.28.100.0 0.0.0.255
redistribute bgp 64999 route-map wan2site
passive-interface default
no passive-interface GigabitEthernet0/0/0.4

RT1>show route-map wan2site
route-map wan2site, deny, sequence 5
  Match clauses:
  Set clauses:
  Policy routing matches: 0 packets, 0 bytes
route-map wan2site, permit, sequence 10
  Match clauses:
    ip address (access-lists): default-only
  Set clauses:
    metric 100000 8 1 1 1
    tag 42
  Policy routing matches: 0 packets, 0 bytes

RT1>show access-list default-only
Standard IP access list default-only
10 permit 0.0.0.0
```

- A. policy routing matches 0 packets means that there are no matches and no routes are being redistributed
- B. all routes are being redistributed with a metric and a tag
- C. The deny, sequence 5 is preventing any routes from and a tag
- D. A default routes is being redistributed with a metric and a tag

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 102

Which options is the implicit access rule for IPv6 ACLs?

- A. permit all
- B. permit neighbor discovery, deny everything else
- C. deny all
- D. permit all ICMP, deny everything else

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 103

Which technology does Cisco PfR use to collect passive monitoring statistics?

- A. NBAR
- B. SNMP
- C. Syslog
- D. NetFlow

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 104

You are backing up a server with a 1 Gbps link and a latency of 2 ms. Which two statements about the backup are true? (Choose two.)

- A. The bandwidth delay product is 2 Mb.
- B. The default TCP send window size is the limiting factor.
- C. The default TCP receive window size is the limiting factor.
- D. The bandwidth delay product is 500 Mb.
- E. The bandwidth delay product is 50 Mb.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 105

What is a requirement for BFD static route support?

- A. CEF must be configured on all routers that will carry traffic.
- B. BFD must be configured on all Ethernet, virtual-template, and dialer interfaces that will carry traffic.
- C. All routers that will carry traffic must have the same software version.
- D. All routers that will carry traffic must be the same model.

Correct Answer: A

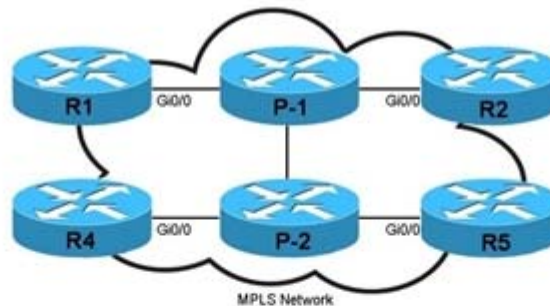
Section: (none)

Explanation

Explanation/Reference:

QUESTION 106

Which two options are two problems that can occur with this configuration? (choose two)



```
R1
ip access-list standard LOOPBACK-ONLY
 permit 172.16.1.0 0.0.0.255
interface loopback0
 ip address 172.16.1.1 255.255.255.255
interface GigabitEthernet0/0
 ip address 10.0.0.1 255.255.255.0
 load-interval 30
 mpls ip
router ospf 1
 router-id 172.16.1.1
 network 10.0.0.1 0.0.0.0 area 0
 network 172.16.1.1 0.0.0.0 area 0
 mpls ldp neighbor 172.16.99.1 password cisco
 mpls ldp discovery targeted-hello accept
 mpls ldp advertise-labels for LOOPBACK-ONLY
```

```
R5
ip access-list standard LOOPBACK-ONLY
 permit 172.16.1.0 0.0.0.255
 permit 10.0.0.0 0.255.255.255
int loopback0
 ip address 172.16.99.1 255.255.255.255
interface GigabitEthernet0/0
 ip address 10.0.0.2 255.255.255.0
 load-interval 30
 mpls ip
router ospf 1
 router-id 172.16.99.1
 network 10.0.0.1 0.0.0.0 area 0
 network 172.16.99.1 0.0.0.0 area 0
 mpls ldp neighbor 172.16.1.1 password cisco
 mpls ldp discovery targeted-hello accept
 mpls ldp advertise-labels for LOOPBACK-ONLY
```

- A. The MPLS path from R1 to R5 becomes unreachable.
- B. R1 and R5 are unable to establish an LDP relationship.
- C. The label for the R1 loopback address is filtered from other MPLS routers.
- D. The label for the R5 loopback address is filtered from other MPLS routers.
- E. MPLS traffic from R1 to R5 takes a suboptimal path.

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 107

Which value does EIGRP use to determine the metric for a summary address?

- A. The average of the component metrics
- B. A default fixed value
- C. The lowest metric among the component routes
- D. The highest metric among the component routes

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 108

Which enhancement does IGMP version 3 offer over IGMP version 2?

- A. support for Source Specific Multicast
- B. a mechanism to decrease leave latency
- C. authentication of multicast streams
- D. backward compatibility with IGMP version 1

Correct Answer: A

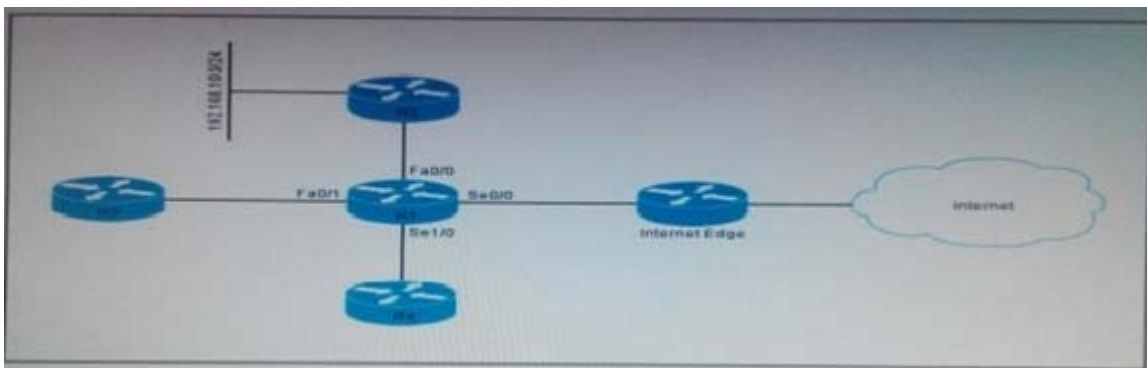
Section: (none)

Explanation

Explanation/Reference:

QUESTION 109

Refer to the exhibit. If R1 uses EIGRP to learn route 192.168.10.0/24 from R2, which interface on R1 uses split horizon for route 192.168.10.0/24?



- A. Se0/0
- B. Fa0/0
- C. Se1/0
- D. Fa0/1

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 110

Which option describes the characteristics of a public Infrastructure as a Service cloud service model?

- A. It is a way of delivering cloud-computing infrastructure (servers, storage, network, and operating systems) as an on-demand service.
- B. It is a cloud-computing platform that facilitates the creation of web applications without the need to maintain the supporting software applications.
- C. It is a cloud service where the underlying hardware is managed by the cloud service provider.
- D. It is a cloud-computing platform that facilitates the creation of web applications without the need to maintain the supporting software operating systems.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 111

Which attribute is not part of the BGP extended community when a PE creates VPN-IPv4 route while running OSPF between PE-CE?

- A. OSPF domain identifier
- B. OSPF route type
- C. OSPF router ID
- D. MED
- E. OSPF network type

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 112

Which two roles are used by devices for building multicast trees using bidirectional PIM? (Choose two)

- A. Pruning Router
- B. Designated Forwarder
- C. Rendezvous Point
- D. Mapping Agent
- E. Candidate Rendezvous Point
- F. Bootstrap Router

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 113

Which IPv4 feature can limit indiscriminate flooding of multicast traffic on a VLAN?

- A. IGMP Filtering
- B. IGMP Snooping
- C. MLD Filtering
- D. PIM Snooping

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 114

What are the minimum requirements for Cisco PfR to provide routing control?

- A. one master controller, two border routers, two internal interfaces, and two external interface
- B. one master controller, one border router, one internal interface, and two external interfaces.
- C. one master controller, two border router, one internal interface, and one external interface.
- D. one master controller, one border router, two internal interfaces, and one external interface.
- E. two master controllers, one border router, one internal interface, and one external interface.

Correct Answer: B

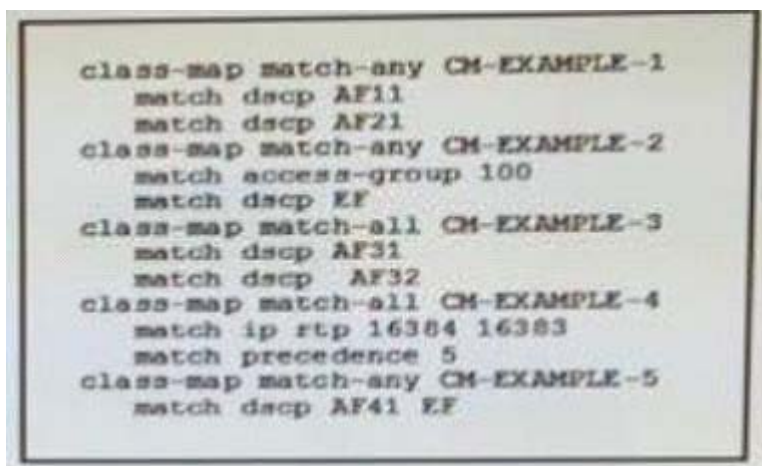
Section: (none)

Explanation

Explanation/Reference:

QUESTION 115

Refer to the exhibit. If you apply this configuration to a device on your network, which class map cannot match traffic?



- A. CM- EXAMPLE-1

- B. CM- EXAMPLE-2
- C. CM- EXAMPLE-3
- D. CM- EXAMPLE-4
- E. CM- EXAMPLE-5

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 116

Which three protocols are permitted by IEEE802.1x port-based authentication before the client is successfully authenticated by the RADIUS server? (Choose three)

- A. IP
- B. CDP
- C. EAPOL
- D. STP
- E. TCP
- F. BOOTP

Correct Answer: BCD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 117

On which three options can Cisco PfR base its traffic routing? (Choose three.)

- A. Time of day
- B. An access list with permit or deny statements
- C. Load-balancing requirements
- D. Network performance
- E. User-defined link capacity thresholds
- F. Router IOS version

Correct Answer: CDE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 118

Refer to the exhibit. If a console port is configured as shown, which response is displayed when you connect to the console port?

```
username admin password 0 notsecure
aaa new-model
aaa authentication login default group tacacs+ local
aaa authorization exec default group tacacs+ local
banner motd ^C
Authorized users only.
^C
line con 0
  exec-timeout 5 0
  privilege level 15
  no vacant-message
  activation-character 124
```

- A. a blinking cursor
- B. the message "Authorized users only"
- C. the username prompt
- D. three username name prompts followed by a timeout message
- E. the message "Connection refused"

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 119

Which two statements about Metro Ethernet services are true? (Choose two.)

- A. EPL is a point-to-point service from one customer site to another across an MPLS backbone.
- B. EVPL is a multipoint service that emulates a LAN over an MPLS backbone.
- C. EPLAN is a multipoint service that emulates a LAN over an MPLS backbone.
- D. EVPL is a point-to-point service from one customer site to another across an MPLS backbone.
- E. ELAN is a point-to-point service from one customer site to another across an MPLS backbone.
- F. EVPL is a multipoint service with a root node that is suitable for multicast services.

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 120

Which two options are restrictions of BGP ORF? (Choose two)

- A. It can be used only with IPv4 multicast.
- B. It requires access lists to match routes.
- C. It can be used only with eBGP.
- D. Multicast is not supported.
- E. It can be used only with iBGP.

Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 121

Which way to influence path selection with EIGRP is preferred?

- A. changing the bandwidth, because it does not have any impact on other router features
- B. changing the bandwidth, because that is what Cisco recommends.
- C. changing the bandwidth, because it must be done only on one interface along the path
- D. changing the delay, even if it must be done on multiple interfaces

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 122

What are two features that distance-vector routing protocols can use to address the count-to-infinity problem? (Choose two.)

- A. split horizon
- B. adjacency dead timers
- C. route tagging
- D. triggered updates
- E. route poisoning

Correct Answer: AE

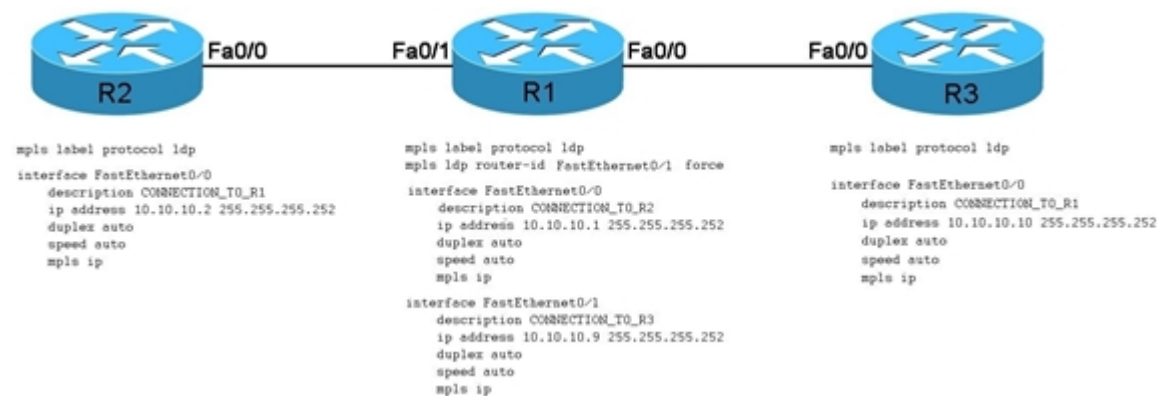
Section: (none)

Explanation

Explanation/Reference:

QUESTION 123

Refer to the exhibit. Between which routers is an LDP session established?



- A. R1 and R3

- B. R1, R2 and R3
- C. R2 and R3
- D. R1 and R2

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 124

Which two items must be defined to capture packet data with the Embedded Packet Capture feature? (Choose two.)

- A. the capture rate
- B. the capture point
- C. the capture buffer
- D. the buffer memory size
- E. the capture filter
- F. the capture file export location

Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 125

How does MSTP maintain compatibility with RSTP?

- A. RSTP implements a TTL that is compatible with the MSTP max age timer.
- B. MSTP supports five port states in the same way as RSTP.
- C. MSTP sends all spanning-tree information in one BPDU.
- D. RSTP encodes region information from an MSTP BPDU into a single instance.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 126

What are IPv6 addresses of the form fc00::/7 known as?

- A. unique local addresses
- B. transition addresses for 6to4
- C. link-local addresses
- D. multicast RP addresses

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 127

Which two statements about route summarization are true? (Choose two)

- A. EIGRP learned routes are automatically summarized
- B. Routes are automatically summarized to their classful boundary with OSPF
- C. When a packet is routed to a destination, the router chooses the most specific prefix from the routing table
- D. It is recommended for use on discontinuous networks
- E. BGP sends both specific and aggregate routes unless the keyword "summary-only" is configured

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 128

Refer to the exhibit. Which statement is true?

```
RP1#show ipv6 mroute
Multicast Routing Table
Flags: D - Dense, S - Sparse, B - Bidir Group, s - SSM Group,
       C - Connected, L - Local, I - Received Source Specific Host Report,
       P - Pruned, R - RP-bit set, F - Register flag, T - SPT-bit set,
       J - Join SPT
Timers: Uptime/Expires
Interface state: Interface, State

(*, FF7E:200:2A02:B111:FC02:1:11FF:11EE), 00:00:35/never, RP
2A02:B111:FC02:1::1, flags: SCLJ
Incoming interface: Null
RPF nbr: ::
Immediate Outgoing interface list:
  Ethernet2/0, Forward, 00:00:35/never
```

- A. The output shows an IPv6 multicast address with link-local scope.
- B. The output shows an IPv6 multicast address that is used for unique local sources only
- C. The output shows an IPv6 multicast address that can be used for BIDIR-PIM only.
- D. The output shows an IPv6 multicast address with embedded RP.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 129

For what reason might you choose to use an SVTI interface instead of a crypto map on a tunnel interface?

- A. SVTIs support dynamic routing protocols without GRE headers.
- B. SVTIs can support multiple IPsec SAs.

- C. SVTIs can carry non-IP traffic.
- D. SVTIs support CEF-switched traffic shaping.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 130

Which three statements about bridge assurance are true? (Choose three.)

- A. Bridge assurance must be enabled on both ends of a link.
- B. Bridge assurance can be enabled on one end of a link or on both ends.
- C. Bridge assurance is enabled on STP point-to-point links only.
- D. Bridge assurance is enabled on STP multipoint links only.
- E. If a bridge assurance port fails to receive a BPDU after a timeout, the port is put into a blocking state.
- F. If a bridge assurance port fails to receive a BPDU after a timeout, the port is put into an error disabled state.

Correct Answer: ACE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 131

What is the purpose of the YANG language?

- A. YANG is a data modeling language used to describe device configuration and operational data
- B. YANG is a scripting language used to program device configuration and operational data
- C. YANG is a markup language used to encode device configuration and operational data
- D. YANG is a communications protocol for sending device configuration and operational data

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 132

Which two discovery mechanism does LDP support? (Choose two.)

- A. strict
- B. extended
- C. loose
- D. targeted
- E. basic

Correct Answer: BE

Section: (none)

Explanation**Explanation/Reference:****QUESTION 133**

Which two statements about IGPs are true? (Choose two)

- A. RIPv2 and OSPF are distance vector protocols.
- B. OSPF and EIGRP have high resource usage.
- C. IS-IS and EIGRP are link-state protocols.
- D. OSPF and IS-IS are classless protocols.
- E. RIPv2 and EIGRP support VLSM.
- F. RIPv2 and IS-IS calculate the metric of a link based on the bandwidth of a link

Correct Answer: DE

Section: (none)

Explanation**Explanation/Reference:****QUESTION 134**

Which command can you enter to prevent a router from displaying Telnet connection messages on the terminal?

- A. service telnet zeroidie
- B. ip telnet hidden hostname
- C. ip telnet hidden address
- D. no ip domain-lookup
- E. ip telnet quiet

Correct Answer: E

Section: (none)

Explanation**Explanation/Reference:****QUESTION 135**

How is the MRU for a multilink bundle determined?

- A. It is negotiated by NCP
- B. It is negotiated by LCP
- C. It is manually configured on the multilink bundle.
- D. It is negotiated by IPCP
- E. It is manually configured on all physical interfaces of a multilink bundle.

Correct Answer: B

Section: (none)

Explanation**Explanation/Reference:**

QUESTION 136

When you implement the EIGRP add-paths feature, which configuration can cause routing issues on a DMVPN circuit?

- A. disabling ECMP mode under the EIGRP process.
- B. disabling automatic summarization
- C. enabling next-hop-self under the EIGRP process.
- D. enabling synchronization under the EIGRP process
- E. disabling the default variance under the EIGRP process
- F. disabling NHRP when deploying EIGRP over DMVPN

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 137

Ping and Traceroute extended options are very useful. What is the difference between using the Record option with the ping command vs. the traceroute command?

- A. The record option is not supported with the ping command
- B. The record option is not supported with the traceroute command
- C. When leveraged with the ping command, the Record option of this command not only informs you of the hops that the echo request (ping) went through to get the destination, but is also informs you of the hops it visited on the return path
- D. When leveraged with the traceroute command, the Record option of this command not only informs you of the hops that the echo request (ping) went through to get the destination, but is also informs you of the hops it visited on the return path

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 138

Which two statements about SSM are true? (Choose two)

- A. It is designed to support many-to-many applications within a PIM domain.
- B. It requires IGMPv3 for source filtering.
- C. It uses(*, G) multicast routing entries to make forwarding decisions.
- D. It can work in conjunction with the ISM service.
- E. Its application and protocols use address 233.0.0.0 ? 233.255.255.255.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 139

Which condition must be satisfied before a Cisco router running RIP can poison a route?

- A. The invalid timer must expire.
- B. The hold down timer must expire.
- C. The flush timer must expire.
- D. The flush timer must reach 240 seconds.
- E. The metric must equal 16.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 140

Which authentication types does OSPF support?

- A. null(or no authentication) and clear text
- B. MD5 only
- C. MD5 and clear text
- D. null(or no authentication), clear text, and MD5
- E. clear text only

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 141

Refer to the exhibit. Which two options are two benefits of this configuration? (Choose two)



- A. increased security
- B. redundancy
- C. reduced jitter
- D. reduced latency
- E. load sharing

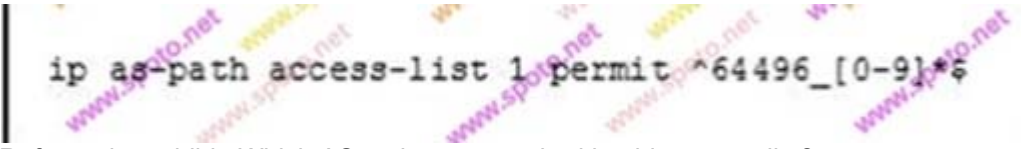
Correct Answer: BE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 142



```
ip as-path access-list 1 permit ^64496_[0-9]*$
```

Refer to the exhibit. Which AS paths are matched by this access list?

- A. the origin AS 64496 only
- B. the origin AS 64496 and any ASs after AS 64496
- C. the directly attached AS 64496 and any ASs directly attached to AS 64496
- D. the directly attached AS 64496 and any longer AS paths

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 143

Which IS-IS network type can operate in the absence of a DIS?

- A. point-to-multipoint
- B. Ethernet
- C. NBMA
- D. point-point

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 144

What is the correct binary equivalent of DSCP value AF41?

- A. 101001
- B. 100001
- C. 100010
- D. 001010

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 145

Which two statements about IPv6 RA guard are true? (Choose two)

- A. It blocks unauthorized ICMPv6 Type 134 packets
- B. It supports host mode and router mode
- C. It provides security for tunneled IPv6 traffic
- D. It is supported in the ingress and egress directions
- E. It blocks unauthorized ICMPv6 Type 133 packets

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 146

Which measure does ISIS use to avoid sending traffic with a wrong MTU configuration?

- A. ISIS does not protect from MTU mismatch.
- B. MTU value is communicated in ISIS Sequence Number PDUs (SNP), and ISIS adjacency is not established if an MTU mismatch is detected.
- C. ISIS uses path MTU discovery as specified in RFC 1063.
- D. ISIS uses padding of hello packets to full MTU.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 147

```
R101#show ip cache verbose flow
```

SrcIf		SrcIPaddress	DstIf		DstIPaddress	Pr	TOS	Flgs	Pkts
Port	Msk	AS	Port	Msk	AS			B/Pk	Active
Et0/0		10.0.0.1	Et1/0*		14.0.0.2	01	80	10	1
0000	/0	0	0800	/0	0			100	0.0

Refer to the exhibit. What is the PHB class on this flow?

- A. EF
- B. none
- C. AF21
- D. CS4

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 148

Which two statements about LDP are true? (Choose two)

- A. LDP sessions are established between LSRs
- B. It enables LSRs to communicate label bindings
- C. It sends hello messages over TCP
- D. It uses a 16-byte identifier
- E. It supports only directed-connected neighbors
- F. It sends hello messages as UDP packets via unicast

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 149

```
Switch# show spanning-tree vlan 1 detail

VLAN0001 is executing the ieee compatible Spanning Tree protocol
  Bridge Identifier has priority 32768, sysid 1, address 0007.0e8f.04c0
  Configured hello time 2, max age 20, forward delay 15
  Current root has priority 8192, address 0007.4f1c.e847
  Root port is 65 (GigabitEthernet2/1), cost of root path is 119
  Topology change flag not set, detected flag not set
  Number of topology changes 1 last change occurred 00:00:35 ago
    from GigabitEthernet1/1
  Times: hold 1, topology change 35, notification 2
    hello 2, max age 20, forward delay 15
  Timers: hello 0, topology change 0, notification 0, aging 300
```

Refer to the exhibit. Which two statements about the output are true? (Choose two.)

- A. Setting the priority of this switch to 0 for VLAN 1 would cause it to become the new root.
- B. This switch is the root bridge for VLAN1
- C. Spanning-tree PortFast should not be enabled on GigabitEthernet2/1
- D. 802.1w spanning tree is being used
- E. Spanning tree PortFast is enabled on GigabitEthernet1/1

Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 150

Which option describes how a VTPv3 device responds when it detects a VTPv2 device on a trunk port?

- A. It sends VTPv3 packets only.
- B. It sends VTPv2 packets only.
- C. It sends VTPv3 and VTPv2 packets.
- D. It sends a special packet that contains VTPv3 and VTPv2 packet information.

Correct Answer: C

Section: (none)

Explanation

Explanation/Reference:

QUESTION 151

Which three statements about IS-IS are true? (Choose three.)

- A. IS-IS can be used only in the service provider network.
- B. IS-IS can be used to route both IP and CLNP.
- C. IS-IS has three different levels of authentication: interface level, process level, and domain level.
- D. IS-IS is an IETF standard.
- E. IS-IS has the capability to provide address summarization between areas.

Correct Answer: BCE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 152

Which two statements about OSPFv3 are true? (Choose two.)

- A. It supports unicast address families for IPv4 and IPv6.
- B. It supports unicast address families for IPv6 only.
- C. It supports only one address family per instance.
- D. It supports the use of a cluster ID for loop prevention.
- E. It supports multicast address families for IPv4 and IPv6.
- F. It supports multicast address families for IPv6 only.

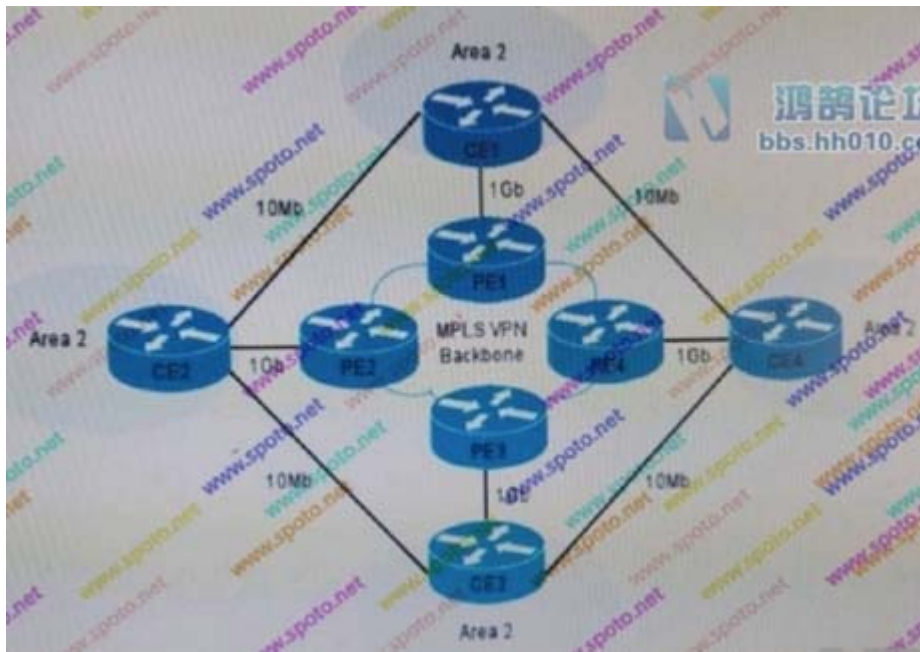
Correct Answer: AC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 153



Refer to the exhibit. Your network uses an MPLS VPN backbone with OSPF routing between all PE and CE routers and on the 10Mb backup links between the CE routers. You notice that data between CE1 and CE3 is flowing over the backup links instead of the higher bandwidth MPLS VPN backbone even when the backbone is up. What is the most likely explanation for this behavior?

- A. The devices are preferentially using inter-area routing
- B. The devices are preferentially using lower-cost routing
- C. The MPLS VPN backbone is using external BGP instead of OSPF
- D. The devices are preferentially using intra-area routing
- E. The network is using sham links on the MPLS VPN backbone

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 154

Which traffic-monitoring class allows Cisco PfR to run on platforms with limited border-router functionality?

- A. active monitoring
- B. fast failover monitoring
- C. passive monitoring
- D. combined monitoring
- E. special monitoring

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 155

MC#sh pfr master border detail						
Border	Status	UP/DOWN		AuthFail	Version	
10.1.1.1	ACTIVE	UP	00:52:21	0	3.0	
Et0/0	INTERNAL	UP				
Et0/1	EXTERNAL	UP				
External Interface	Capacity (Kbps)	Max BW (Kbps)	BW Used (Kbps)	Load (%)	Status	Exit Id
Et0/1	Tx 500	450	192	39	UP	2
	Rx	500	49	9		

Border	Status	UP/DOWN		AuthFail	Version	
10.1.1.2	ACTIVE	UP	00:52:21	0	3.0	
Et0/0	INTERNAL	UP				
Et0/1	EXTERNAL	UP				
External Interface	Capacity (Kbps)	Max BW (Kbps)	BW Used (Kbps)	Load (%)	Status	Exit Id
Et0/1	Tx 500	450	175	33	UP	1
	Rx	500	0	0		

Refer to the exhibit. Which statement is true?

- A. The Cisco PfR state is UP;however, the external interface Et0/1 of border router 10.1.1.1 has exceeded the maximum available bandwidth threshold
- B. The Cisco PfR state is UP;however, an issue is preventing the border router from establishing a TCP session to the master controller.
- C. The Cisco PfR state is UP and is able to monitor traffic flows: however MD5 authentication has not been successful be the master controller and the border route
- D. The Cisco PfR State is UP ; however,the receive capacity was not configured for inbound traffic
- E. The Cisco PfR state is UP,and the link utilization out-of-policy threshold is set to 90 percent for traffic exiting the external links.

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 156

What are the two EEM event subscribers? (Choose two)

- A. CLI
- B. script
- C. applet
- D. none
- E. syslog

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 157


```

R3#ping
Protocol [ip]:
Target IP address: 10.1.2.1
Repeat count [5]: 1
Datagram size [100]:
Timeout in seconds [2]: yes
Extended commands [n]: yes
Source address or interface:
Type of service [0]:
Set DF bit in IP header? [no]: yes
Validate reply data? [no]:
Data pattern [0xABCD]: 0xAAAA
Loose, Strict, Record, Timestamp, Verbose[none]:
Sweep range of sizes [n]: y
Sweep min size [36]: 1480
Sweep max size [18024]: 1500
Sweep interval [1]:
Type escape sequence to abort.
Sending 21, [1480..1500]-byte ICMP Echos to 10.1.2.1, timeout is 2 seconds:
Packet sent with the DF bit set
Packet has data pattern 0xAAAA
!!!!!!f!!!!MMMMMMMMMM
Success rate is 52 percent (11/21), round-trip min/avg/max = 16/21/36 ms

```

Refer to the exhibit. What is the maximum size of a packet that can be sent successfully from R3 to 10.1.2.1 without enabling fragmentation?

- A. 1490 bytes
- B. 1480 bytes
- C. 1501 bytes
- D. 1479 bytes
- E. 1521 bytes
- F. 1500 bytes

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 158

Which two statements about GLBP are true? (Choose two.)

- A. Each GLBP group supports up to 4 MAC addresses.
- B. It uses Hello, Request, and Reply packet types.
- C. It allows members to elect up to two gateways as the AVG.
- D. It communicates to multicast address 224.0.0.18.
- E. It supports stateful switchover.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 159



Refer to the exhibit. Which effect of this configuration is true?

- A. R1 and R2 form an adjacency.
- B. R2 interface F0/1 accepts Hello packets from R3.
- C. R2 and R3 form an adjacency.
- D. R3 advertises the 192.168.12.0/24 network.
- E. R2 interface F0/1 accepts routing updates from R3.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 160

Which command can you enter to configure a Cisco router running OSPF to propagate the static default route 0.0.0.0 0.0.0.0 172.31.15.1 within the OSPF process?

- A. default-information originate
- B. redistribute static subnets
- C. redistribute static metric 1 subnets
- D. redistribute static

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 161

Which two statements about the passive-interface command EIGRP are true ? (Choose two)

- A. It configures the device to advertise only connected interfaces to neighbors with EIGRP.
- B. It configures the interface to use unicast messages to establish EIGRP neighbor relationships.

- C. It allows incoming routing updates to be received but disables outgoing routing updates.
- D. It disables processing of incoming hello messages.
- E. If it is enabled globally under EIGRP on the device, it can be disabled for individual interfaces to allow those interfaces to remain active.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 162

Which two statements are true about IS-IS? (Choose two.)

- A. IS-IS DIS election is nondeterministic.
- B. IS-IS SPF calculation is performed in three phases.
- C. IS-IS works over the data link layer, which does not provide for fragmentation and reassembly.
- D. IS-IS can never be routed beyond the immediate next hop.

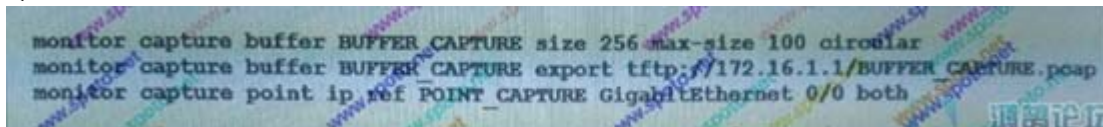
Correct Answer: CD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 163



Refer to the exhibit. Which two additional configuration lines must you add so that the device will capture data packets using Embedded Packet Capture (EPC)? (Choose two).

- A. monitor capture buffer BUFFER_CAPTURE filter access-list CAPTURE_FILTER
- B. monitor capture point ip process-switched POINT_CAPTURE from-us
- C. monitor capture point associate POINT_CAPTURE BUFFER_CAPTURE
- D. monitor capture buffer BUFFER_CAPTURE limit allow-nth-pak 100
- E. monitor capture point start all

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 164

Which two statements about logging are true? (Choose two.)

- A. Logs can be displayed on the console or on a remote terminal.
- B. The mnemonic can refer to a hardware device, a protocol, or a software module.
- C. Log messages include a mnemonic that describes the message.

- D. A log message can include both uptime and the datetime timestamps.
- E. When you enable sequence numbers, the datetime timestamp is disabled automatically by default.
- F. A log message's facility value indicates the hardware on which the log message was generated.

Correct Answer: CE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 165



Refer to the exhibit. Which three statements correctly describe the route reflector's behavior? (Choose three.)

- A. The route reflector will reflect routes from R 1 to R2
- B. The route reflector will not reflect routes from R1 to R2
- C. The route reflector will reflect routes from R1 to R3
- D. The route reflector will not reflect routes from R1 to R3
- E. The route reflector will reflect routes from R3 to R1
- F. The route reflector will not reflect routes from R3 to R1

Correct Answer: ACE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 166

Which IS-IS router type can have neighbors in any area?

- A. Level 1/Level 2 Intermediate System only
- B. Both Level 1 Intermediate Systems and Level 2 Intermediate Systems
- C. Level 2 Intermediate System only
- D. Both Level 1/Level 2 Intermediate Systems and Level 2 Intermediate Systems
- E. Level 1 Intermediate System only

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 167

```
router eigrp 100
  passive-interface FastEthernet0/0
  network 192.168.35.0
  network 192.168.45.0
  no auto-summary
  neighbor 192.168.35.3 FastEthernet0/0
```

Refer to the exhibit. When you apply this configuration to the router, which effect is true?

- A. The router multicasts hello packets via interface F0/0.
- B. The router sends hello packets to neighbor 192.168.35.3 via unicast
- C. The router broadcasts hello packets via interface F0/0.
- D. The router stops sending hello packets to neighbor 192.168.35.3

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 168

What characteristic of OSPFv3 LSAs enables support for prefix suppression?

- A. Router-LSAs and Network-LSAs do not contain topology information
- B. Router LSAs and Network-LSAs do not contain prefix information
- C. Router-LSAs and Network-LSAs are flooded into the entire OSPF domain
- D. Router-LSAs and Network-LSAs are flooded only on the local link

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 169



Refer to the exhibit. The ISIS router type settings on all routers are left at the default value. Which two statements correctly describe the ISIS adjacencies that will form? (Choose two).

- A. The R1 to R2 adjacency will be L2 only

- B. The R1 to R3 adjacency will be L1 and L2
- C. The R1 to R2 adjacency will be L1 and L2
- D. The R2 to R3 adjacency will be L1 and L2
- E. The R2 to R3 adjacency will be L1 only

Correct Answer: AD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 170

Which statement is true when using a VLAN ID from the extended VLAN range (1006-4094)?

- A. VLANs in the extended VLAN range can be used with VTPv2 in either client or server mode.
- B. VLANs in the extended VLAN range can only be used as private VLANs.
- C. STP is disabled by default on extended-range VLANs.
- D. VLANs in the extended VLAN range cannot be pruned.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 171



Refer to the exhibit. Edge 1 and Edge 2 are running OTV across the transport Network. When an Ethernet frame destined for MAC address BB arrives at Edge 1, how is the frame encapsulated?

- A. Edge 1 encapsulates the frame in an OTV packet after removing the layer 2 preamble and FCS
- B. Edge 1 encapsulates the frame in an OTV packet preserving the layer 2 preamble and FCS
- C. Edge 1 encapsulates the frame in an OTV packet after recalculating the FCS
- D. Edge 1 encapsulates the frame in an OTV after updating the layer 2 preamble with Edge2's MAC address

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 172

Which two statements correctly describe MLD snooping? (Choose two.)

- A. It is independent of IGMP snooping
- B. It can be disabled globally and then enabled on individual VLANs
- C. Global configurations override VLAN configurations
- D. It can be enabled on VLANs 1 through 1001 only
- E. VLAN query values override global values

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 173

Which two statements about QoS and marking are true? (Choose two)

- A. The set-discard-class command can be configured for ATM and MPLS protocols
- B. It can use a table map to mark traffic
- C. It requires Cisco Express forwarding to be enabled on the sending interface and the receiving interface
- D. It is supported on tunnel interfaces
- E. It is supported on Fast EthernetChannel and ATM SVC interfaces

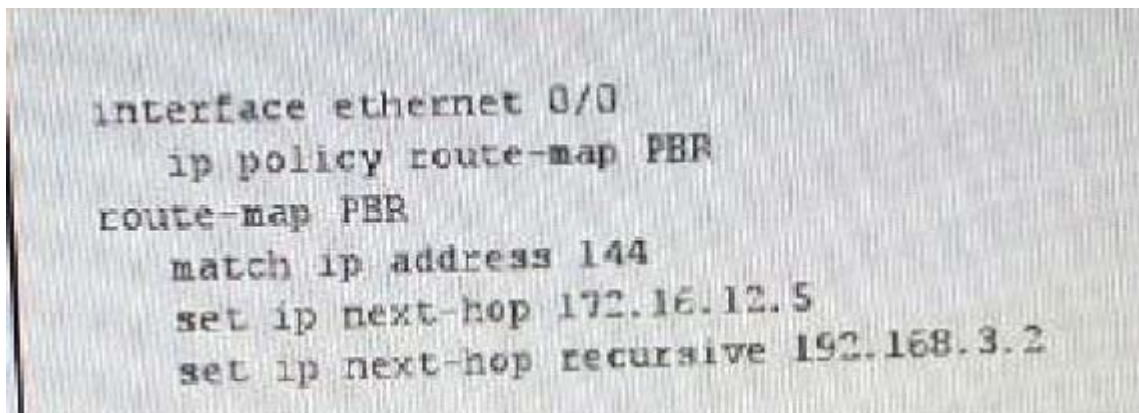
Correct Answer: AD

Section: (none)

Explanation

QUESTION 174

Refer to the exhibit. Which statement correctly describes how a router with this configuration treats packets that matches access-list 144 if it does not know a path to 172.16.12.5, and does not know a path 192.168.3.2?



```
interface ethernet 0/0
 ip policy route-map PBR
route-map PBR
 match ip address 144
 set ip next-hop 172.16.12.5
 set ip next-hop recursive 192.168.3.2
```

- A. It send an ICMP source quench message.
- B. It drops the packet immediately.
- C. It routes the packet into a loop and drops it when the TTL reaches zero.

D. It routes the packet based on the packet's destination using the routing table.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 175

Which two statements about native VLANs are true? (Choose two.)

- A. They require VTPv3.
- B. They are used to forward untagged traffic only.
- C. They are used to forward tagged traffic only.
- D. They are configured in VLAN database mode.
- E. They are configured under the trunk interface.
- F. They are used to forward both tagged and untagged traffic.

Correct Answer: BE

Section: (none)

Explanation

QUESTION 176

When you deploy DMVPN, What is the purpose of the command key cisco test address 0.0.0.0.0.0.0.0.?

- A. It is configured on the hub and spoke routers to establish peering
- B. It is configured on the hub to set the pre-shared key for the spoke routers.
- C. It is configured on the internet PE routers to traverse the ISP core.
- D. It is configured on the spokes to router.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 177

Which technology allows several switches to operate together as one device?

- A. HSRP
- B. VRRP
- C. LACP
- D. Stack Wise.

Correct Answer: D

Section: (none)

Explanation

QUESTION 178

Which TCP features allows a client to request a specific packet that was lost?

- A. flow control
- B. sliding window
- C. fast recovery
- D. selective acknowledgment

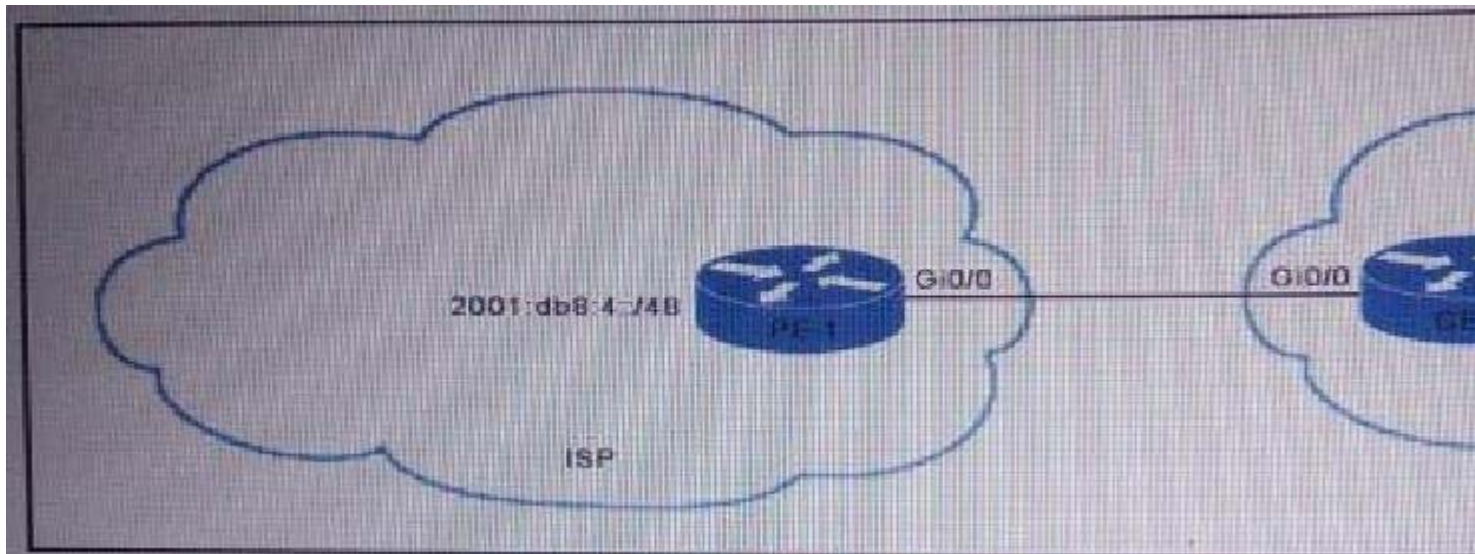
Correct Answer: D

Section: (none)

Explanation

QUESTION 179

Refer to the Exhibit. Which configuration can you implement on PE-1 to allow CE-1 to receive delegated IPv6 prefixes?



A.

```
ipv6 local pool CE-1 2001:db8:4:8888::/48 32
ipv6 dhcp pool CE-1-DHCP
  prefix-delegation pool CE-1 lifetime infinite infinite
interface GigabitEthernet0/0
  ipv6 address 2001:db8:4:822::1/64
  ipv6 dhcp server CE-1-DHCP
```

B.

```
ipv6 local pool CE-1 2001:db8:4:8888/56 48
ipv6 dhcp pool CE-1-DHCP
  prefix-delegation pool CE-1 lifetime infinite infinite
interface GigabitEthernet0/0
  ipv6 address 2001:db8:4:822::1/64
  ipv6 dhcp server CE-1-DHCP
```

C.

```
ip local pool CE-1 2001:db8:4:8888::/64 48
ipv6 dhcp pool CE-1-DHCP
  prefix-delegation pool CE-1 lifetime infinite infinite
interface GigabitEthernet0/0
  ipv6 address 2001:db8:4:822::1/64
  ipv6 dhcp server CE-1-DHCP
```

D.

```
ipv6 local pool CE-1 2001:db8:4:8888/49 56
ipv6 dhcp pool CE-1-DHCP
interface GigabitEthernet0/0
  ipv6 address 2001:db8:4:822::1/64
  ipv6 dhcp server CE-1
```

E.

```
ipv6 local pool CE-1 2001:db8:4:8888::/48 56
ipv6 dhcp pool CE-1-DHCP
  prefix-delegation pool CE-1 lifetime infinite infinite
interface GigabitEthernet0/0
  ipv6 address 2001:db8:4:822::1/64
  ipv6 dhcp server CE-1-DHCP
```

Correct Answer: E

Section: (none)

Explanation

Explanation/Reference:

QUESTION 180

What are two major requirements for configuring an extended VLAN with VTPv2 (Choose two)

- A. VLAN pruning must be enabled
- B. The device must be operating in VTP transparent mode
- C. The configuration must be made in global configuration mode
- D. The VLAN must be configured in VLAN database mode
- E. The reduced MAC address feature must be disabled

Correct Answer: BC

Section: (none)

Explanation

QUESTION 181

Drag and Drop Question

Drag and drop the OTV component on the left to the function it performs on the right.

Select and Place:

edge device

join interface

internal interface

overlay interface

site VLAN

authoritative edge device

elected by the OTV to provide loop-free multihoming

connects VLANs to be extended

receives local OTV hello messages

provides an uplink to the overlay network

encapsulates layer 2 frames within an IP header

connects a site to an overlay network

Correct Answer:

authoritative edge device

internal interface

site VLAN

join interface

overlay interface

edge device

Section: (none)

Explanation

Explanation/Reference:

QUESTION 182

Drag and Drop Question

Select and Place:

Operates in normal, receive-only, and passive mode.

Operates in tunnel mode and transport mode.

Provides dynamic spoke-to-spoke traffic flow.

Supports multicast traffic natively on private IP networks

Supports operations between products from multiple vendors.

Users a peer-to-peer encryption style for point-to-point GRE tunnels.

DMVPN

GETVPN

IPsec

Correct Answer:

DMVPN

Provides dynamic sp

Supports multicast t
n

GETVPN

Operates in normal, rec

Supports operation
multi

IPsec

Operates in tunnel m

Users a peer-to-peer c
point

Section: (none)

Explanation

Explanation/Reference:

QUESTION 183

Drag and Drop Question

Drag and drop the BGP attribute on the left to the correct category on the right.

Select and Place:

Originator ID

Community

Local-Preference

AS_Path

Cluster List

Origin

BGP Well-Known Mandatory Attribute

1

2

BGP Well-Known Discretionary Attribute

1

BGP Optional Transitive Attribute

1

Correct Answer:

Originator ID

Cluster List

BGP Well-Known Mandatory Attribute

AS_Path

Origin

BGP Well-Known Discretionary Attribute

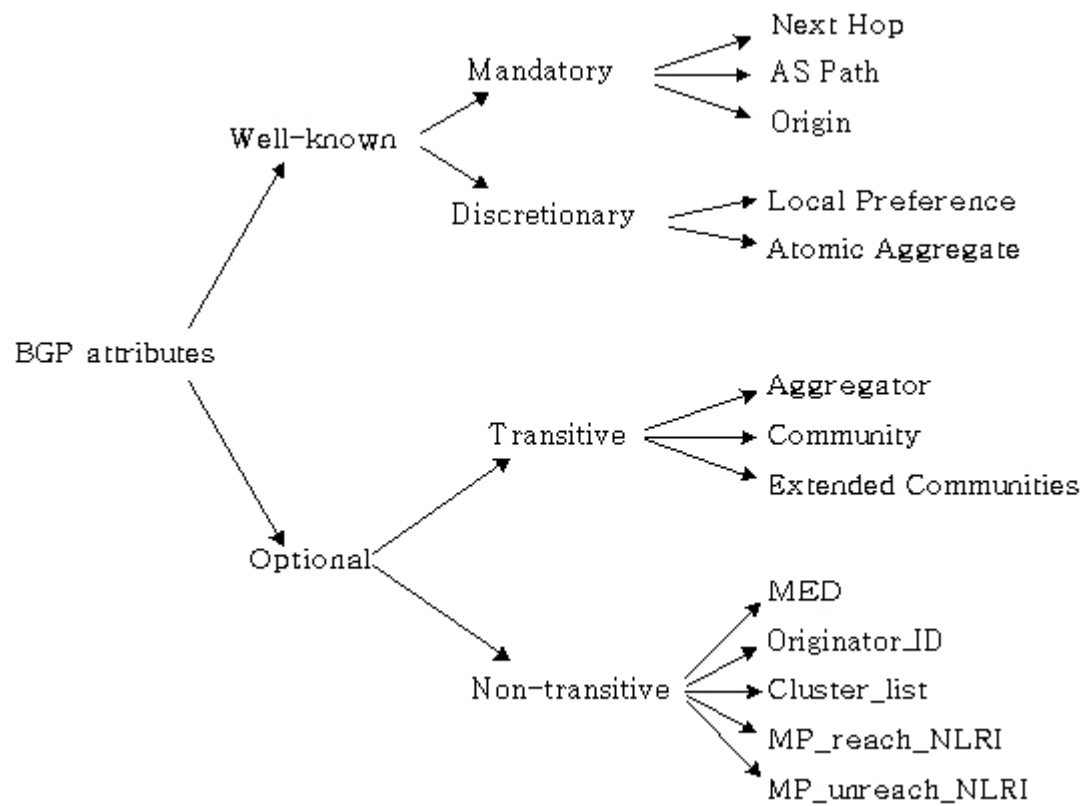
Local-Preference

BGP Optional Transitive Attribute

Community

Section: (none)
Explanation

Explanation/Reference:
Explanation:



<http://www.deepsh.it/networking/BGP/bgp-attributes.png>

QUESTION 184

Select and Place:

Multiprotocol Reachable NLRI

an optional, nontransitive attribute

Multiprotocol Unreachable NLRI

a value that indicates whether multiprotocol is supported

AFI

an optional, nontransitive attribute

SAFI

a value that indicates a next hop

Capability code

a value that identifies a subtype

Correct Answer:

Multiprotocol Unrea
Capability co
Multiprotocol Reac
AFI
SAFI

Section: (none)
Explanation

Explanation/Reference:

QUESTION 185

Select and Place:

conserves IPv4 addresses
creates a unique binding for every translation
performs 1:1 translation
performs 1:1 translation
provides end-to-end address transparency
requires IPv6 address assignments that can be translated to IPv4
supports all modes of IPv6 address assignment
wastes IPv4 addresses

Stateless NAT64
Stateful NAT64

Correct Answer:

Section: (none)
 Explanation

Explanation/Reference:

QUESTION 186

Select and Place:

Stateless NAT64

performs 1:1 translation

provides end-to-end address transparency

requires IPv6 address assignments that can be translated to IPv4

wastes IPv4 addresses

Stateful NAT64

conserves IPv4 addresses

creates a unique binding for every translation

performs 1:N translation

supports all modes of IPv6 address assignment

Agent

Get

Manager

MIB

Notification

Set

An operation that retrieves ob

An operation that retrieves unsol
from an agent.

A system that monitors and contr
network hosts.

An operation that modifies ob

A software component that main
data.

A virtual storage area for man

Correct Answer:

Get
Notification
Manager
Set
Agent
MIB

Section: (none)
Explanation

Explanation/Reference:

QUESTION 187

Select and Place:

transport

messages

operations

content

line

provides a

provides a

holds info

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 188

Select and Place:

set default interface

set interface

set ip default next-hop

set ip next-hop

Correct Answer:

set ip

set i

set ip def

set defa

Section: (none)
Explanation

Explanation/Reference:

QUESTION 189

Select and Place:

authoritative	The NHRP mapping entry v registration
implicit	NHRP information was obtained maintains the NBM
unique	NHRP information was learned f
registered	The NHRP mapping entry is pro by a mapping address that ha different NBI

Correct Answer:

regist

autho

imp

unio

Section: (none)
Explanation

Explanation/Reference:

QUESTION 190

Select and Place:

Authentication Algorithm	An 8-bit unsigned value that the receiver uses to verify the sender's authentication.
Authentication key	The time at which the OSPF process starts using the SA to encrypt and verify packets.
KeyID	The time at which the OSPF process starts processing packets for the new key.
Key Start Accept	A secret value used when encrypting and verifying packets.
Key Start Generate	The time at which the OSPF process starts using the SA to encrypt and verify packets.
Key Stop Accept	A value that controls the encryption and decryption of packets.
Key Stop Generate	The time at which the OSPF process starts processing packets for the new key.

Correct Answer:

KeyID
Key Start Gener
Key Stop Acce
Authentication
Key Stop Gener
Authentication Alg
Key Start Acce

Section: (none)

Explanation

Explanation/Reference:

QUESTION 191

Select and Place:

Router LSA (Type 1)	advertises an internal network or set of networks to other areas
Network LSA (Type 2)	associates a group of prefixes for transit networks
Inter-Area Prefix LSA for ABRs (Type 3)	indicates whether the router is part of another area
Inter-Area Router LSA for ASBRs (Type 4)	collects link-state information and cost information from the entire network
Autonomous System External LSA (Type 5)	provides the link-local address of a router and the external network on the same link
Link LSA (Type 8)	redistributes external routes into the network
Intra-Area Prefix LSAs (Type 9)	enables routers to determine the best path to a destination network

Correct Answer:

Inter-Area Prefix LSA for ABRs (Type 7)
Intra-Area Prefix LSAs (Type 1)
Router LSA (Type 1)
Network LSA (Type 2)
Link LSA (Type 8)
Autonomous System External LSA
Inter-Area Router LSA for ASBRs

Section: (none)

Explanation

Explanation/Reference:

QUESTION 192

Select and Place:

a Cisco proprietary protocol

supports active and passive configuration modes

supports 16 ports in a group, with 8 ports active

supported by the IEEE 802.3ad protocol

supports auto and desirable configuration modes

supports 8 ports in a group, with all ports active

PAgP

PAgP 1

PAgP 2

PAgP 3

LACP

LACP 1

LACP 2

LACP 3

Correct Answer:

6RD

6to4

GRE

IPv4-compatible

ISATAP

manual

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 194

Select and Place:

Limit malicious traffic on the network.

Manage microbursts.

Support asynchronous links.

Support error detection.

Use an external key server.

Correct Answer:

www.spoto.net

www.spoto.net

www.spoto.net

www.spoto.net

www.spoto.net

Section: (none)
Explanation

Explanation/Reference:

QUESTION 195

Select and Place:

BGP

EIGRP

IS-IS

ODR

OSPF

RIP

Operates v

Correct Answer:

www.spoto.net

www.spoto.net

www.spoto.net

www.spoto.net

www.spoto.net

www.spoto.net

Section: (none)
Explanation

Explanation/Reference:

QUESTION 196

Select and Place:

data pattern

set DF bit in IP header

sweep range of sizes

type of service

validate reply data

identifies non-conform

identifies the smaller

troubleshoots fra

used to confirm th

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 197

Select and Place:

control-plane packets	packets that are forwarded to the destination
data-plane packets	packets that are forwarded to the destination
exception IP packets	packets that are forwarded to the destination
management-plane packets	packets that are forwarded to the destination
service-plane packets	packets that are forwarded to the destination

Correct Answer:

www.spoto.net
www.spoto.net
www.spoto.net
www.spoto.net
www.spoto.net

Section: (none)
Explanation

Explanation/Reference:

QUESTION 198

Select and Place:

Drag and drop the method for refreshing BGP prefixes on the left to the corresponding description on the right.

hard reset	
soft reset	tears down
dynamic inbound soft reset	
Enhanced Route Refresh	finds

Correct Answer:

Drag and drop the method for refreshing BGP prefixes on the left to the corresponding description on the right

Section: (none)

Explanation

Explanation/Reference:

QUESTION 199

Select and Place:

hello
query
reply
request
update

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 200

Select and Place:

6to4 tunneling	Configu
duel stack	Trans
IPv6 to IPv4 GRE tunneling	Us
ISATAP tunneling	Uses I
NAT-PT	Uses s

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 201

Select and Place:

attached-bit

Alerts neighboring devices

fast-flood

Allows an L1/L2 router

overload bit

Controls the L1/L2 router t

route leaking

Improves the con

suppress interlevel

Prevents the device fr

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 202

Select and Place:

class

associates a flow m

flow exporter

associates a flow

flow monitor

attaches to an inter

flow policy

specifie

flow record

specifies the dest

service-policy

specifies the key a

Correct Answer:

Section: (none)
Explanation

Explanation/Reference:

QUESTION 203

Select and Place:

operates using a broadcast model

prunes unwanted traffic

requires a join message to add an interface to the routing table

requires a rendezvous point

uses shared trees

uses only source trees

uses a pull model to build multicast forwarding tables

follows a push model to build the distribution tree

Dense Mode

Sparse Mode

Correct Answer:

Dense Mode

operates using a broadcast model

prunes unwanted traffic

uses only source trees

follows a push model to build the distribution tree

Sparse Mode

requires a join message to add an interface to the route

requires a rendezvous point

uses shared trees

uses a pull model to build multicast forwarding table

Section: (none)

Explanation

Explanation/Reference:

QUESTION 204

Your NetFlow collector is not working due to a large amount of traffic entering your network which is destined to a single IP address.

Which NetFlow feature allows you to collect the top source hosts for this traffic on the local router?

- A. A NetFlow can export flows only to an external flow collector
- B. show ip cache flow
- C. ip accounting
- D. ip flow-top-talkers

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 205

When you implement PfR, which IP SLA probe is used to determine the MOS?

- A. jitter
- B. latency
- C. packet loss
- D. throughput

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 206

Which statement about Type-4 LSA in OSPFv2 is true?

- A. It is present only in the backbone area.
- B. It is generated by each ABR and forwarded in non-stub areas.
- C. It is forwarded in NSSA areas.
- D. It is generated by the ASBR and forwarded throughout the whole OSPF domain.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 207

Which three technologies can be used to implement redundancy for IPv6? (Choose three)

- A. IPv6 NA
- B. NHRP
- C. HSRP
- D. DVMRP
- E. GLBP
- F. IPV6 RA

Correct Answer: CEF

Section: (none)

Explanation

Explanation/Reference:

QUESTION 208

On a network using DiffServ, which option refers to the actions that applied to a packet as it moves through the network?

- A. DSCP
- B. PHB
- C. Codepoint
- D. IP-precedence

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 209

Refer to the exhibit. R1 is unable to ping the device at 10.3.3.3. Which two options are possible reasons for the problem? (Choose two.)

```
R1#ping 10.3.3.3

Type escape sequence to abort.
Sending 5, 100-byte ICMP Echos to 10.3.3.3, timeout is 2 seconds:
.....
Success rate is 0 percent (0/5)

R1#sh run | sec ip route
ip route 10.3.3.3 255.255.255.255 FastEthernet0/0

R1#sh arp
Protocol Address          Age (min)  Hardware Addr  Type   Interface
-----
Internet 10.3.3.3             0          Incomplete     ARPA
Internet 192.168.12.1         -          c001.2314.0000 ARPA    FastEthernet0/0
Internet 192.168.12.2         4          c002.24f0.0000 ARPA    FastEthernet0/0

R1#debug arp
ARP packet debugging is on
*Mar 1 00:07:52.851: IP ARP: sent req src 192.168.12.1 c001.2314.0000,
                        dst 10.3.3.3 0000.0000.0000 FastEthernet0/0.
*Mar 1 00:07:54.851: IP ARP: sent req src 192.168.12.1 c001.2314.0000,
                        dst 10.3.3.3 0000.0000.0000 FastEthernet0/0.
*Mar 1 00:07:56.851: IP ARP: sent req src 192.168.12.1 c001.2314.0000,
                        dst 10.3.3.3 0000.0000.0000 FastEthernet0/0.
```

- A. The static route is configured as a host route.
- B. The static route points to a broadcast interface without a next-hop
- C. IP CEF is disabled on the local router.
- D. Proxy ARP is disabled on the next-hop router.
- E. The dynamic routing protocol configuration is missing
- F. IP CEF is disabled on the remote router.

Correct Answer: BD

Section: (none)

Explanation

Explanation/Reference:

QUESTION 210

Which two statements about the host address 10.88.100.10/13 are true? (Choose two)

- A. The network address is 10.64.0.0
- B. The broadcast address is 10.95.255.255
- C. The network address is 10.88.0.0
- D. The broadcast address is 10.64.255.255
- E. The broadcast address is 10.88.255.255
- F. The network address is 10.88.100.0

Correct Answer: BC

Section: (none)

Explanation

Explanation/Reference:

QUESTION 211

Refer to the exhibit. Which statement describes what the authoritative flag indicates?

```
R1#show ip nhrp detail
10.10.10.2/32 via 10.10.10.2, Tunnel0 created 00:16:59, expire 00:00:30
  Type: dynamic, Flags: authoritative unique registered used
  NBMA address: 192.168.2.2
10.10.10.3/32 via 10.10.10.3, Tunnel0 created 00:11:34, expire 00:00:55
  Type: dynamic, Flags: authoritative unique registered used
  NBMA address: 192.168.3.3
```

- A. Authentication was used for the mapping.
- B. R1 learned about the NHRP mapping from a registration request.
- C. Duplicate mapping in the NHRP cache is prevented.
- D. The registration request had the same flag set.

Correct Answer: B

Section: (none)

Explanation

Explanation/Reference:

QUESTION 212

Which two statements about VRF-lite are true? (Choose two)

- A. An isolated VRF routing table is created for each VRF.
- B. A single customer VRF can support overlapping IP addresses
- C. Multiple ISP customers can be supported on one customer edge device.

- D. Two or more VRFs can be assigned to a single Layer 3 interface
- E. At least one physical interface must be configured to enable a VRF

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 213

Refer to the exhibit. If the route to 10.1.1.1 is removed from the R2 routing table, which server becomes the master NTP server?

```
R2#show run | include ntp
ntp server 10.1.1.1 prefer
ntp server 10.3.3.3
ntp server 10.4.4.4
```

- A. R2
- B. the NTP server at 10.3.3.3
- C. the NTP server at 10.4.4.4
- D. the NTP server with the lowest stratum number

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 214

Which two statements about EIGRP load balancing are true? (Choose two.)

- A. EIGRP supports 6 unequal-cost paths.
- B. A path can be used for load balancing only if it is a feasible successor.
- C. EIGRP supports unequal-cost paths by default.
- D. Any path in the EIGRP topology table can be used for unequal-cost load balancing.
- E. Cisco Express Forwarding is required to load-balance across interfaces.

Correct Answer: AB

Section: (none)

Explanation

Explanation/Reference:

QUESTION 215

Which two statements about 802.1Q tunneling are true? (Choose two.)

- A. It requires a system MTU of at least 1504 bytes.
- B. The default configuration sends Cisco Discovery Protocol, STP, and VTP information.

- C. Traffic that traverses the tunnel is encrypted.
- D. It is supported on private VLAN ports.
- E. MAC-based QoS and UDLD are supported on tunnel ports.
- F. Its maximum allowable system MTU is 1546 bytes.

Correct Answer: AE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 216

How are the Cisco Express Forwarding table and the FIB related to each other?

- A. The FIB is used to populate the Cisco Express Forwarding table.
- B. The Cisco Express Forwarding table allows route lookups to be forwarded to the route processor for processing before they are
- C. There can be only one FIB but multiple Cisco Express Forwarding tables on IOS devices.
- D. Cisco Express Forwarding uses a FIB to make IP destination prefix-based switching decisions.

Correct Answer: D

Section: (none)

Explanation

Explanation/Reference:

QUESTION 217

Which action does route poisoning take that serves as a loop-prevention method?

- A. It immediately sends routing updates with an unreachable metric to all devices.
- B. It prohibits a router from advertising back onto the interface from which it was learned.
- C. It advertises a route with an unreachable metric back onto the interface from which it was learned.
- D. It poisons the route by tagging it uniquely within the network.

Correct Answer: A

Section: (none)

Explanation

Explanation/Reference:

QUESTION 218

Which two statements about AAA authentication are true? (Choose two)

- A. RADIUS authentication queries the router's local username database.
- B. TACACS+ authentication uses an RSA server to authenticate users.
- C. Local user names are case-insensitive.
- D. Local authentication is maintained on the router.
- E. KRB5 authentication disables user access when an incorrect password is entered.

Correct Answer: DE

Section: (none)

Explanation

Explanation/Reference:

QUESTION 219

Drag and Drop Question

Drag and drop the NETCONF layers on the left onto their appropriate description on the left.

Select and Place:

transport	defines a set of base protocol operations
messages	provides a communication path between the client and server
operations	provides a framing mechanism for encoding RPCs
content	holds information on data models and protocol operations

Correct Answer:

	operations
	transport
	messages
	content

Section: (none)

Explanation

Explanation/Reference:

QUESTION 220

Drag and Drop Question

Drag and drop the OTV component on the left to the function it performs on the right.

Select and Place:

edge device
join interface
internal interface
overlay interface
site VLAN
authoritative edge device

elected by the OTV to provide loop-free multihoming
connects VLANs to be extended
receives local OTV hello messages
provides an uplink to the overlay network
encapsulates layer 2 frames within an IP header
connects a site to an overlay network

Correct Answer:

authoritative edge device
internal interface
site VLAN
join interface
overlay interface
edge device

Section: (none)
Explanation

Explanation/Reference:

QUESTION 221
Drag and Drop Question

Drag each NTP command on the left to its effect on the right.

Select and Place:

ntp master
ntp orphan
ntp peer
ntp refclock
ntp server

Configures an external time source.
Configures the device as an authoritative time server.
Configures the device to simulate a UTC source when real time sources are inaccessible.
Configures the device to synchronize its time against a server.
Configures the device to synchronize its time against another device.

Correct Answer:

ntp refclock
ntp master
ntp orphan
ntp server
ntp peer

Section: (none)

Explanation

Explanation/Reference: